

The Mining Journal, RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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No. 2493.—Vol. LIII.

LONDON, SATURDAY, JUNE 2, 1883.

[WITH SUPPLEMENT.] PRICE SIXPENCE.
BY POST, £1 4s. PER ANNUM

**MR. JAMES H. CROFTS, STOCK AND SHARE BROKER
AND MINING SHARE DEALER.**
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
ESTABLISHED 1842.

Business transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.
Business negotiated in Stocks and Shares not having a general market value.

Every Friday a general and reliable List issued (a copy of which will be forwarded on application), containing closing prices of the week.
Mines Inspected.
BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, ST. AUSTELL.
TELEPHONE NUMBER 1003.

SPECIAL DEALINGS in the following, or part:—
100 Asia Minor, 8s. 20 Gunnis (Clit), £19s. 50 Port Phillip, 2s. 3d.
100 Almada, 13s. 9d. 100 Hingham Down, 4s. 6d. 50 Parys Copper, 3s. 3d.
100 Belford Unit., £1 11 3 80 Hoover Hill, 3s. 6d. 30 Phoenix Unit., £2 3/4
100 Bratsberg, £1 1/2 50 Home Mines Trust, 12s. 6d. 25 Panulicillo, £6 7s. 6d.
100 Bratsberg, £1 1/2 50 Home Mines Trust, 12s. 6d. 50 Prince of Wales, 6s. 6d.
100 Carnarvon Cop., 5s. 80 Herodfoot, 6s. 9d. 100 Pestarena, 4s.
100 Callao Bis, 13s. 6d. 75 Indian Consol., 3s. 10 Rio Tinto, £22.
100 Chile Gold, 13s. 6d. 50 Indian Glenrock, 3s. 9d. 100 Ruby, £1 3s. 9d.
100 Colombian Hyd., 6s. 3d. 25 Indian Phoenix, 3s. 9d. 50 Rhodes Reef, 3s. 9d.
100 Consolidated, 3s. 50 Indian Trevel, 3s. 9d. 10 S. Condurow, £3 1/2
100 California, 22s. 6d. 50 Kapanga, 10s. 10 Roman Grav., £3 1/2
100 Colorado, £2 11s. 3d. 25 Killifreth, £3 3s. 9d. 10 S. Condurow, £3 1/2
100 Canada Copper, 13s. 6d. 50 Kite Hill, 100 South Darren, 17s. 6d.
100 Chontales, 6s. 3d. 70 La Plata, 18s. 100 S. E. Wynnad, 5s.
100 Cor. So. Austr., Cop., 50 Langford, 8s. 20 So. Devon Uni., 5s.
100 Devala Cen., 1s. 9d. 20 Last Chance, 2s. 6d. 100 Sortridge, 2s. 3d.
100 Devala Moyar, 3s. 20 Leadhill, £2 3/4 40 South Fenstru, 3s. 6d.
100 Devon Consol., £4 1/2 10 Marke Valley, 19s. 50 Tambracherry, 6s. 9d.
100 Devon Friend., 5s. 3d. 10 Mona, 4s. 40 Tanker, Gt. Con., 4s.
100 Devon United, 5s. 50 Mounts Bay, 7s. 3d. 50 Treavean, 11s.
100 Don Pedro, 2s. 50 Myasore Gold, 5s. 6d. 25 Treavean, £2 1/2
100 Drakeville, 7s. 6d. 50 New Caradon, 7s. 3d. 20 Uni. Mexican, £4.
100 East Blue Hills, 7s. 6d. 100 New Callao, 8s. 9d. 50 Victoria Gold, 13s. 9d.
100 Eberhardt, 8s. 50 New Emma, £2. 10 Van, 2s.
100 East Caradon, 17s. 6d. 100 New Quebrada, £4 8 9 30 West Devon, 5s.
100 East Chiverton, 25 No. Blue Hills, 2s. 6d. 50 West Phoenix, 15s.
100 East Craven Moor, 5s. 25 New Kitty, £2 2s. 6d. 100 West Caradon, 14s.
100 East Lovell, 10s. 50 No. Herodfoot, 5s. 50 West Crebor, 6s. 3d.
100 East Wheel Rose, 12s. 50 Nour. Monde, 5s. 6d. 25 West Polbreen, £1 7 6
100 Frontino, £2. 20 North Penstru, 12s. 10 West Kitty.
100 Goginan, 16s. 25 New W. Caradon, 5s. 9 20 West Polbreen, 20s.
100 Gold Coast, 21s. 100 Old Shepherds, 11s. 50 Wheel Coates, 6s. 6d.
100 Grogwinion, 15s. 50 Oregano, 4s. 9d. 25 Wheel Crebor, £3.
100 Guinea Gold Cat., 5s. 6 50 Orita, 21s. 3d. 25 Wheel Jewell.
100 Gwanton, 7s. 50 Penhalva, 10s. 75 Wynnad Persev., 3s.
100 Great Laxey, £17 1/2. 75 Potosi, 18s. 3d.

* * SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.
* * SPECIAL BUSINESS AT CLOSE PRICES in all Market TIN, COPPER and LEAD SHARES.

RAILWAYS—SPECIAL BUSINESS.—Fortnightly Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

FOREIGN BONDS—SPECIAL BUSINESS.—Fortnightly Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

AMERICAN AND CANADIAN STOCKS AND SHARES—SPECIAL BUSINESS.
Fortnightly Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

GOLD AND SILVER MINES.—SPECIAL BUSINESS in ALL marketable INDIAN GOLD SHARES, and in California, Callao, "Bis," Gold Coast, Guinea Gold Coast, New Callao, West Callao, Tolima, A. Tolima B, La Plata, Rio Tinto, Frontino and Bolivia, Potosi, Chile, Nouveau Monde, Ruby, Richmond, Victoria.
* * SHARES IN THE ABOVE SOLD FOR FORWARD DELIVERY ONE TWO, OR THREE MONTHS ON DEPOSIT OF TWENTY PER CENT.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.
ESTABLISHED 1842.

ELECTRIC LIGHT SHARES—SPECIAL BUSINESS.
Anglo-American, Hammond, Finsen-Joel.
Brush, Maxim-Weston.
Shares sold for cash, account, or for forward delivery (one, two, or three months) on deposit of 20 per cent.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

EAST WHEEL ROSE, OLD SHEPHERDS, MOUNTS BAY, TRESAVEAN
SPECIAL BUSINESS in the above for cash or account.
* * SHARES SOLD FOR FORWARD DELIVERY (one, two, or three months), on DEPOSIT OF TWENTY PER CENT.

FOR SPECIAL SALE, FOR FORWARD DELIVERY, ONE, TWO, OR THREE MONTHS, subject to deposit of TWENTY PER CENT.
100 East Wheel Rose, 12s. 6d.; 100 Mounts Bay, 8s. 6d.; 100 Old Shepherds, 11s.; 100 Tresavean, 12s.; 100 Home Mines Trust, 12s. 6d.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**MR. W. H. BUMPUS, STOCK AND SHARE BROKER,
AND MINING SHARE DEALER.**
44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

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RAILWAYS, BANKS, FOREIGN and COLONIAL BONDS, TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS.
Accounts opened for the Fortnightly Settlement
A List of Investments free on application.

MR. BUMPUS has SPECIAL BUSINESS in the undermentioned:—
100 Almada, 13s. 9d. 100 Indian Phoenix, 3s. 9d. 70 Prince of Wales, 6s. 6d.
100 Bratsberg, £2 1/2 100 Indian Consolidated, 7s. 6d.
100 Birdseye Creek, 27s. 6d. 200 Port Phillip, 2s. 3d.
100 Chontales, 6s. 6d. 15 Kilmeth, 17s. 6d. 75 Pen-y-Orsedd, 20s.
100 Callao Bis, 13s. 6d. 50 Kilmeth, 17s. 6d. 15 Richmond, 47.
100 California Gold, 22s. 6d. 100 La Plata, 17s. 6d. 50 Ruby, 25s.
100 Colombian Hydraulic, 6s. 3d. 100 Leadhill, £2 11s. 3d. 10 Roman Gravels, 3s. 9d.
100 Colorado, £3 1/2 150 Myasore Gold, 7s. 6d. 60 South Devon, 7s. 6d.
100 Carn Camborne, 25s. 100 New Trumpet Consols, 25s. 100 Tankerville, 5s.
100 Chile Gold, 13s. 6d. 20 New Quebrada, £4 8 9 25 United Mexican, £4 8 9
100 Devon Friendship, 5s. 25 New Kitty, £2 1/2 50 West Polbreen, 28s.
20 Devon Consols, £4 1/2 100 Nouveau Monde, 7s. 50 West Godolphin, 25s.
40 East Caradon, 20s. 50 Orita, 21s. 3d. 15 Wheel Grenville, £3 1/2
20 Emma, 42s. 50 Oregano, 4s. 9d. 50 Wheel Crebor, £3.
100 Frontino, £2. 100 Potosi, 17s. 6d. 10 Wheel Agar.
20 Great Holway, 20 Panulicillo, £2 1/2 10 West Kitty, £13 1/2
50 Hingham Down, 4s. 6d. 20 Pestarena, 2s. 6d.

Where prices are not inserted, offers may be made.
SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.
Mr. BUMPUS devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others.
WILLIAM HENRY BUMPUS, SWORN BROKER,
OFFICES: 44 THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

MR. W. TREGELLAS, 40, BISHOPSGATE STREET WITHIN, E.C.
Deals in all descriptions of STOCKS and SHARES at close market prices.
W. TREGELLAS strongly recommends the purchase of GOLD HILL MINING shares at present prices.

BRITISH AND FOREIGN MINING OFFICES.
Messrs. PETER WATSON AND CO.,
18, AUSTIN FRIARS,
OLD BROAD STREET, LONDON, E.C.
BANKERS: THE ALLIANCE BANK (Limited).

**Messrs. PETER WATSON AND CO.'S
BRITISH AND FOREIGN MONTHLY MINING NEWS
—STOCK AND SHARE INVESTMENT NOTES—MINES,
MINERALS, AND METAL MARKETS—SHARE LIST,
No. 854, Vol. XVII., for JUNE month, will shortly be ready,
and will be sent to customers on application.**
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**MR. ALFRED E. COOKE,
DEALER IN BRITISH AND FOREIGN STOCKS AND SHARES
OF EVERY DESCRIPTION.**
(From 76, Old Broad Street)
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9, OLD BROAD STREET, LONDON.

STOCKS AND SHARES FOR SALE.
Mr. ALFRED E. COOKE can SELL the following lots (or any smaller number of shares) to immediate applicants at prices annexed, free of commission:—

Where prices are not inserted, the market price of the day will be taken, or offers may be made:—
15 Bratsberg Cop., 33s. 90 Langford Silver, 7s. 6d. 300 Sortridge Copper and Tin, 2s. 6d.
30 Callao Bis Gold, 13s. 9d. 120 Mounts Bay, 8s. 6d. 10 South Darren Silver-lead, 15s. 3d.
140 Colombian Hydraulic Gold, 6s. 50 New West Caradon Copper, 5s. 6d. 25 South Caradon Copper, 2s. 6d. pm.
50 Carn Camborne Tin & Copper, 75s. 240 Nouveau Monde Gold 140 Tresavean Copper, 4s.
100 California Gold, 22s. 6d. 7s. 130 North Blue Hills, 2s 6d. 110 Victoria Gold, 11s. 3d.
225 Chontales Gold, 6s. 3d. 200 Old Shepherds, 11s. 3d. 5 West Kitty Tin, £14
100 Devon Friend., 5s. 6d. 50 Organos, 32s. 6d. 50 West Caradon Copper, 13s. 9d.
85 East Rose Lead, 12s. 6d. 20 Orita Gold, 23s. 9d. 40 West Polbreen Tin, 3s. 6d.
40 E. Blue Hills Tin, 8s. 3d. 100 North Grogwinion Lead, 15s. 50 West Gonamena Copper, 2s. 6d.
30 Eberhardt Sil., 8s. 90 Prince of Wales, 6s. 6d. 50 Wheel Jane Tin, 20s.
100 Frontino Lead, 21s. 50 Potosi Gold, 17s. 20 W. Crebor Cop., £2.
100 Goginan Lead, 13s. 6d. 50 Port Phillip Gold, 2s 9d. 100 W. Devon Cop., 3s. 6d.
100 Grogwinion Lead, 13s. 6d. 10 Richmond Silver, 47 50 Wheel Coates Tin, 7s. 6d.
70 Home Mines Trst., 13s. 6d. 10 Ruby, £14. 75 West Kitty, £13 1/2.
60 Herodfoot. 10 Roman Gravels Lead, £3 1/2.
100 La Plata Lead, 18s. 40 Leadhill, £2 12s. 6d.
Many of the above shares can be supplied for settlement by arrangement at the middle or end of July account on payment of 20 per cent. deposit. Shares not found in the above list may be purchased on application.
ALFRED E. COOKE, 9, OLD BROAD STREET, LONDON.

PROFITABLE MINING SPECULATIONS.—A great rise is probable in several low-priced shares. Good speculative investments can be selected for sums of £50, £100, to £1000 and upwards.
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PRICES of every description of STOCKS and SHARES are received continuously throughout the day by TELEGRAPH from the STOCK EXCHANGE.
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(Opposite the Stock Exchange, with which the office are in DIRECT TELEGRAPHIC COMMUNICATION.)

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Has special business in the following for cash or settlement or arrangement:—
Almada, 13s. 9d. East Rose, 11s. Panulicillo, £6 3s.
Asia Minor, 8s. 6d. East Blue Hills, 7s. 6d. Parys, 3s. 6d.
Bratsberg, 33s. Frontino, 32s. 6d. Potosi, 17s. 6d.
California, 22s. 6d. Great Laxey, £17. Prince of Wales, 6s.
Callao Bis, 13s. 6d. Herodfoot, 6s. 3d. Roman Gravels, £3 1/2
Callacombe, 5s. Home Mines, 10s. Sortridge, 2s. 3d.
Carn Camborne, 22s. Isabelle, 14s. 3d. South Caradon, 12s. 9d.
Chile Gold, 13s. 9d. Kapanga, 5s. Tankerville, 4s. 3d.
Colombian, 6s. Kilmeth, 17s. 6d. Tresavean, 10s. 6d.
Colombian Hyd., 6s. 3d. La Plata, 17s. 6d. Tully, 2s. 6d.
Chontales, 6s. Leadhill, £2 12s. 6d. Trevaunance, £2 1/2
Colorado, £3 1/2. Mounts Bay, 8s. United Mexican, 4s.
Devon Friendship, 5s. 3d. Nouveau Monde, 6s. 3d. West Caradon, 12s. 6d.
Drakeville, 7s. 9d. Old Shepherds, 11s. 3d. West Crebor, 7s. 3d.
Eberhardt, 7s. Organos, 32s. 6d. West Kitty, £13 1/2.
Orita, 21s. 3d.
Special business in East Rose, Old Shepherds, Tresavean, Mounts Bays, and Indian Gold Mines, and all stocks and shares, ordinary and miscellaneous.
BANKERS: LONDON AND WESTMINSTER.

**JOHN B. REYNOLDS, STOCK AND SHARE DEALER,
37, WALBROOK, LONDON, E.C.**
Established Twenty-five Years.
BANKERS: LONDON JOINT-STOCK.

Mr. REYNOLDS, at considerable expense to himself, is prepared to advise as to the Purchase or Sale of Mining Shares on the receipt of a fee of 21s. His regular correspondence, however, can be advised gratuitously.
Mr. REYNOLDS still continues to buy TREVAUNANCE shares at reasonable rates, and sellers will kindly communicate with him.
Mr. REYNOLDS has specially and persistently recommended WEST KITTY shares from 2s. each and upwards. He now recommends their purchase for a further and important rise.

**Messrs. ENDEAN AND CO., STOCK AND SHARE DEALERS,
55, GRACECHURCH STREET, LONDON, E.C.**
ESTABLISHED 1861.
BANKERS: London and Westminster, Lothbury, E.C.

**MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,
29, BISHOPSGATE STREET, LONDON, E.C. (Established 30 Years)**
Can SELL the following SHARES at prices annexed:—
100 Asia Minor, 15s. paid, 50 Gold Hill, offer wtd. 50 Prince of Wales, 6s. 6d.
10s. 40 Great Holway, £5. 40 Potosi, 17s. 6d.
60 Almada, 13s. 9d. 50 Home Mines Tr., 12s. 6d. 100 Parys Cop., 3s. 6d.
50 Birdseye Creek, £1 8 6 25 Hingham, 5s. 40 Ruby, £1 3s. 9d.
50 California Gold, £1 1/2 25 Indian Queen Consols, offer wanted. 150 Sortridge Consols, 2s. 3d.
50 Colombian Gold, 6s. 3d. 60 Corporation of Copper, 50 Kapanga, 5s. 6d. 40 South Caradon (Ltd.), 4s. 6d.
60 Carn Camborne, 25s. 22s. 6d. 50 Leadhill, £2 12s. 6d. 50 Tankerville, 4s.
70 Callao Bis, 13s. 6d. 50 La Plata, 17s. 9d. 40 Tresavean, 10s. 6d.
75 Chile Gold, 13s. 6d. 40 Mounts Bay, 8s. 9d. 30 Uni. Mexican, £4.
100 Chontales, 6s. 3d. 35 Marke Valley, 18s. 9d. 20 Van, £6 1/2
30 Colorado, £3 1/2 50 Mona Consols, 100 Victoria Gold, 20s.
125 Dev. Friendship, 5s. 6d. 100 Nouveau Monde, 6s. 6d. 50 West Crebor, 7s. 3d.
40 East Blue Hills, 7s. 6d. 50 New W. Caradon, 5s. 9d. 20 Wheel Crebor, £3 2 6
50 Eberhardt, 8s. 3d. 40 New Emma, £2 11s. 3d. 40 Western Andes Gold, £5 1/2
40 East Caradon, 17s. 6d. 25 Organos Gold, £1 10s. 40 Old Shepherds, 11s. 3d.
40 East Rose, 12s. 6d. 20 Orita, fully pd., £14 1/2. 75 West Caradon, 14s.
40 Frontino, £2.

VICTORIA GOLD (Venezuela).—I strongly recommend the immediate purchase of these shares for an important rise.
SELECTED, PROGRESSIVE, AND DIVIDEND-PAYING FOREIGN AND COLONIAL MINES—Circular with full particulars, and table of returns, now ready. Price 1s., free to clients.
BUYER of TOLIMA A and B SHARES—any number.
Shares in Home, Foreign, and Colonial mines, bought and sold at net market prices, free of commission.
PURCHASES FOR FORWARD DELIVERY AT SPECIAL PRICES ON RECEIPT OF DEPOSIT OF 20 PER CENT.
BANKERS: ALLIANCE BANK (Limited).

**FERDINAND R. KIRK, STOCKBROKER,
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Fortnightly Accounts opened in all Stock Exchange Securities on receipt of the usual cover.
SPECIAL BUSINESS in the following or any part:—
60 Akankoo, 9s. 90 East Wh. Rose, 11s. 3d. 100 Old Shepherds, 11s. 3d.
50 Almada, 13s. 50 East Blue Hills, 7s. 6d. 30 Panulicillo, £6 3/4
20 Alamillos, £1 1/2 40 Goginan, 13s. 6d. 60 Potosi, 17s. 6d.
40 Asia Minor, 11s. 100 Glenrock, 3s. 3d. 120 Port Phillip, 2s. 6d.
80 Bratsberg, £1 1/2 80 Home Mines Trust, 12s. 6d. 80 Pestarena, 2s. 9d.
40 Carn Camborne, 11s. 3d. 50 Herodfoot, 7s. 50 Rio Tinto, £22 1/2
40 Carn Camborne, 11s. 3d. 80 La Plata, 18s. 20 Richmond, £6 18s. 9d.
Coal, £2 1/2 100 Mounts Bay, 7s. 6d. 40 Sierra Buttes, £1 10s.
50 California Gold, £1 3 20 Mason & Barry, £15 1/2 100 So. East Wynnad, 3s. 3d.
100 Colombian Hyd., 6s. 3d. 60 Organos, £1 15s. 60 Tresavean, 9s.
100 Chontales, 6s. 3d. 60 Oregano, 4s. 3d. 60 Victoria Gold.
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Mines Inspected at Home and Abroad on moderate terms.
Mr. SKEWIS having had great and practical experience in Cornish Mining is, therefore, in a position to give trustworthy information.
COLLACOMBE CONSOLS.—The discovery made in the 40 cross-cut results practically in a new mine, as the lode stands whole from the 95 to surface. At present price of shares this is the cheapest mine in the market.
Wheel Crebor, Bedford United, and Prince of Wales are all worth buying at prices now offering.

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Special selection of Mines for present investment—West Caradon, New Caradon, West Gonamena, New West Caradon, Wheel Crebor, West Crebor, Parys, and Langford. The average market value of the above mines a little later on will in all probability be hundreds per cent. higher.
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Has SPECIAL BUSINESS in Victoria Gold, Organos, Tolima, and Colombian Hydraulic Mines.
Railways, Foreign Stocks, Mines, and Miscellaneous Securities dealt in at the closest market prices.
Speculative accounts opened for the fortnightly settlement on receipt of the usual cover.
Cheques and P. O. O.'s crossed National Provincial Bank of England.

**MR. E. J. BARTLETT, STOCK AND SHARE DEALER,
30, GREAT ST. HELENS, LONDON, E.C.**
Selected List of Investments post free on application.

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STOCK AND SHARE DEALER.**
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100 Bratsberg, 100 East Wheel Rose, 50 Pen-y-Orsedd
100 Colombian Hydraulic, 50 Frontino, 50 Prince of Wales, 50
25 Carn Camborne, 50 Flagstaff, 150 Bossa Grande, 30 South Caradon, 30
50 Callao Bis, 50 Guinea Coast Gold, 100 Tocopilla, 100
20 Carnarvon Gt. Consols, 25 Great Holway, 100 Tamar, 100
100 Chontales, 100 Indian Trevelyan, 50 Tresavean, 50
50 Colorado, 100 Indian Consolidated, 25 Wheel Crebor, 50
20 Devon Consols, 50 Kapanga, 50 York Fen, Pref.
15 East Caradon, 75 Mounts Bay, 100 ditto Ordinary.
Prices on application, which may enable the public to get the shares different to advertised prices owing to the limited amount of business doing.
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 CHRISTOPHER WASHINGTON GREGORY, Esq., The Grove, Camberwell, S.E.
 THOMAS ARNOLD MARTEN, Esq., J.P., Director of the Glamorganshire Banking Company (Limited), Swansea.
 RICHARD MORRIS, Esq., J.P., Beechfield, Doncaster; Director of the Widnes Metal Company.
 CHARLES TAYLER WARE, Esq., 11, Phillimore Gardens, Kensington, W.
 (With power to add to their number.)

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 SWANSEA—THE GLAMORGANSHIRE BANKING COMPANY (LIMITED).
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 AUDITOR—THOMAS GLASS, Esq., 5, Mitre Court, Temple, E.C.
 SECRETARY (*pro tem.*)—Mr. WILLIAM BOURNE.

OFFICES—91, BLACKFRIARS ROAD, LONDON, S.E.

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From the "HARDWARE TRADE JOURNAL,"
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"Mr. WILLIAM ELMORE, of 91, Blackfriars Road, London, S.E., is busily engaged fitting up the Art Metal Depositing Works of the Electrolytic Company, Charlotte Street, Blackfriars. The Electro-plating tanks of nickel, copper, brass, zinc, and tin, holding several thousands of gallons each (worked by an 'Elmore' Patent Dynamo-Electric Machine, capable of depositing about 500 lbs. of metal per day), and the specially designed and constructed polishing machinery will all combine to constitute this most gigantic and complete arrangement of the kind in the world. Here boiler tubes, each over 20 ft. in length, may be coated with copper, large ornamental iron lamp posts, and similar massive iron structural objects of great weight may be covered with electro-deposited copper, forming, when finished, a complete shell of bronze, which may be nickel-plated, or even silver-plated, if desired. Large rough or polished iron surfaces may be coated with brass, or zinc, or tin. Copper electrotype copies are taken of art subjects, the reproduction being so perfect that the process is used for multiplying plates from which bank-notes are printed, and the most delicate ferns, flowers, leaves, and insects are coated with copper, and afterwards with gold, silver, nickel, &c., for use as ornaments of various kinds. Fenders, fire-irons, grates, &c., may be brased. The largest marine engines may be nickel-plated in the large nickel-plating plant, worked by the powerful 'Elmore' machine with ease and certainty, which only a few months since would have been pronounced almost impossible. The Electrolytic Company, we understand, express perfect satisfaction with the work already completed by Mr. Elmore, and there is no doubt that with that gentleman's large practical experience the company could not have been in better hands. The entire premises will be lighted by the 'Elmore' system of electric light."

From the "LONDON MINING JOURNAL."

"The new 'Elmore' Dynamo-Electric Machine can be seen in operation in London, and is considered one of the most wonderful scientific apparatus which has yet been brought before the public; it should be inspected by all who are interested in any kind of metallurgical operations."

Ordnance Department—
Extra from their letter of 25th April, 1883, in reference to some hydraulic rams which the "Electrolytic Company" coated with a considerable thickness of copper—
"The coating of the rams was perfect with the exception that the first one was rather thinner than intended; all of them, however, answered their purpose perfectly."

SIR W. G. ARMSTRONG, MITCHELL, AND CO. (LIMITED),
OF NEWCASTLE-ON-TYNE.

From the NICKEL PLATING COMPANY, 13, GREEK STREET, SOHO.
Your Machine does its work most satisfactorily, and has never once reversed current, which the Weston Machine frequently did."

From the ELECTROLYTIC COMPANY,
ART METAL DEPOSITING WORKS,
CHARLOTTE STREET, BLACKFRIARS, LONDON.

"The 'Elmore' Dynamo-Electric Machine and entire outfit which you have supplied to this company have given perfect satisfaction."

From the NICKEL AND SILVER PLATING WORKS,
2, CHARLES STREET, CURTAIN ROAD, E.C.

"Having had one of the 'Elmore' Patent Dynamo-Electric Machines in constant use for several months, it gives me great pleasure to say that with it I have been able to deposit four times the weight of metal per day which I had been enabled to do with the Dynamo-Electric Machine, which it has displaced in my establishment."

From the LONDON NICKEL PLATING COMPANY.

"We have much pleasure in expressing our entire satisfaction with the nickel-plating solution, anodes, and Dynamo Machine that you have supplied us with."

From the DYNAMO-ELECTRIC PLATING WORKS,
2, OLD SWAN LANE, LONDON.

"The quality of the nickel solutions and anodes at these works, which were supplied by you, is most satisfactory in every way. The Dynamo Machine also works excellently, and has given no trouble whatever since it has been started."

AND MANY OTHERS.

Dynamo-Electric Machines, Outfits, &c., supplied to Her Majesty's Government—several Departments. Messrs. Williams, Foster, and Co., Swansea. The India Rubber and Gutta Percha, and Telegraph Works Company (Limited). Messrs. H. H. Vivian and Co. (Limited). Messrs. Thomas De la Rue and Co. Messrs. John Lysaght (Limited) Bristol. Messrs. Waterlow and Sons (Limited). The Singer Manufacturing Company (Limited). Messrs. Cassell, Petter, and Galpin. Messrs. William Clowes and Sons (Limited). Messrs. Kelly and Co. Messrs. Christopher Baker and Sons, Birmingham. Messrs. Wright and Butler, Birmingham. Messrs. John Grinsell and Sons, Birmingham. Messrs. A. S. Cattell and Co. Messrs. Best and Lloyd, Birmingham. The Electro Amalgamator Company (Limited). Messrs. William Impy and Co. And numerous others.

DEVON GREAT CONSOLS COMPANY.

than we anticipated. We knew that we would meet with some people, but the amount we have met with all has necessarily made the program more constructive. I think, though, that all of us are dealing with rock-drills. So, on of our first tasks is to think that sufficient progress has not been made, and we have had offers from rival rock-drill manufacturers to make a sort of contract, with a condition that if they succeed in carrying out the work quicker and more economically than it is now being done, then we are to buy their machinery at the end. We have that under consideration, and are still ready to receive offers from contractors to complete 430 latitudes. Whether this will come to anything or not I cannot tell you. You will observe that I have three reports which contain every information that we can give you. First, there is the report of the directors, upon which we are ready to answer any enquiries. Then comes the report of the local managers. They also will be prepared to give the most minute details upon any subject upon which you may be pleased to ask for information. Not wishing to trust entirely to our own judgment, and remembering what a great understanding has been shown by the directors and the people in the district, and also the local experts in the district, who were placed in the neighbourhood, and in now connected with the company. We selected

Capt. C. Thomas, a gentleman very well known in the district, and he has given in his report his views generally as to how matters should be conducted. I may say that we were carrying out the operations on the plan which he suggests as the most beneficial. In cutting the tunnel we have come across two or three small veins; but we have not yet found anything good enough to stop and develop, and we are going on as fast as possible with the view of making a communication between the shaft and the tunnel. We are confident, judging from the general character of the country and from the neighbouring mines which have proved so valuable, that we shall meet with something much more satisfactory than anything we have yet met with. At the mouth of the tunnel as all the stuff is brought out, it forms a great bank, which will ultimately provide a reservoir for a considerable sheet of water to enable us to have a constant supply of water for the reduction works, which we propose to erect when we are ripe for them. The machinery is working extremely well. It has been put up very economically, and it is proving that we were very fortunate in the purchase we made. With regard to the top of the hill and the operations which are going on there, we have got about 9 fms. below the 75 fm. level. We are constantly finding very good specimens of tin, and we are laying open a section which is offering the abundant promise for the future. We are most sanguine that soon we shall be able to meet some of the outgoing expenses by the products we obtain in this working. I shall conclude by moving—"That the report of the board of directors and statement of accounts now read, with the auditors' report thereon, be received and adopted, and entered on the minutes of this day's proceedings."—Gen. COLIN COOKWORTHY seconded the motion.

Mr. PAIR complained that the expenses of the company were too heavy, and suggested that the number of directors might be reduced, so that those who remained might be properly paid for their services. While the property was in its early stage of development it behooved them to be economical as possible. In the course of some further conversation, Dr. Brown and Mr. SMITH referred to the necessity for economy in all directions, Mr. Smith urging particularly that the board should be reduced to three members.

The CHAIRMAN pointed out that the directors were taking less than they were entitled to take under the Articles of Association, and their fees were very small for a concern of such magnitude. He reminded Dr. Brown, who had spoken of the depressed price of shares, that the company was not a mere speculation, and that the real value of the shares would only be known when the work for which the company was started is accomplished.

The CHAIRMAN proposed the re-election of the retiring directors—Messrs. Peter Watson and Henry Wilson.—Mr. BENTLEY seconded the proposition.

Mr. PETER WATSON said he would like to make a few remarks before the proposition was put. He was by far the largest shareholder in the undertaking, and his friends were amongst the largest shareholders. The company, it must be remembered, was started with the specific objects of driving the deep adit and sinking a shaft from the top of the hill to meet that adit. The shaft had now been sunk 73 fathoms, while the tunnel had been driven about 160 fathoms, and he did not believe the work could be accomplished in a better manner or with greater expedition. The ground in the tunnel had been very hard, but any day they might come into a changed condition of ground, which would in all probability be the forerunner of a great improvement in the value of the lode. It was, however, impossible to speak with certainty, and he simply gave that as his opinion and as the result of his experience. This was a speculation of no ordinary character, and it was one of very great promise. The directors held nearly 4000 shares, and they all had great confidence in the undertaking. They all had the interests of the company at heart, and worked hard to ensure its success. With regard to the proposition that the expenses should be reduced, he stated that every possible economy was being practised. The remuneration of the board was fixed by the Articles of Association, but he would be happy to meet the wishes of the shareholders in that respect, and he had no doubt that his colleagues would do the same. (Cheers.) If the shareholders wished it he would promise for himself and his colleagues that they would for the present only take half the amount allowed by the Articles of Association. (Cheers.)

The proposition was then unanimously adopted.

The CHAIRMAN proposed the re-election of Mr. Langton and Mr. Stewart, the auditors.—Mr. WISDOM seconded the motion, which was carried.

Capt. BROWN said he was in his opinion as to the prospects of the undertaking, and he believed that if the operations were properly prosecuted they would be rewarded by good results. At the top of the hill and in the tunnel there were many lodes which they must intersect, and these lodes had been very profitable in neighbouring mines.

Mr. PETER WATSON explained the plan of the workings, and in the course of some general observations, reiterated his belief in the success of the undertaking, and said that the lodes which undoubtedly traversed the sett had yielded millions of pounds in produce in the neighbouring mines.

The usual compliment closed the meeting.

HINGTON DOWN CONSOLS MINING COMPANY.

The ordinary general meeting of shareholders was held at the offices of the company, Queen-street-place, on Wednesday, Mr. EDGAR FIGGESS in the chair.

Mr. JOHN ELPHICK (the secretary) read the notice convening the meeting. The reports and accounts were taken as read.

The CHAIRMAN said the shareholders had doubtless read the reports, and those documents gave them all the information possible. The chief feature in them was that they had made no great discoveries, and as they were getting somewhat near the end of their tether they had taken steps in concert with Messrs. Taylor to reduce the expenses as far as possible. It would be seen that the expenditure had been very considerably reduced, and that they had just made a saving of £1000. The accounts were plain and satisfactory, but if there were any points requiring explanation he would be most happy to give it. The directors had taken a great deal of pains to promote the success of the company, and they had occasionally been down to the mine, and consulted with Capt. Richards as well as with Messrs. Taylor on the operations in progress, and he did not think they could have done more than they had to bring about a better state of things. The Chairman then formally moved the adoption of the report and accounts.—Mr. STEWART seconded the motion, which was carried without discussion.

Mr. F. BLADON said the shareholders would like to hear what Mr. Taylor had to say in regard to the prospects of the company.

Mr. RICHARD TAYLOR said: There is unfortunately no very new feature in our mine; that is to say there has been no marked change in the lode in those levels in which we have continued to explore the mine since your last meeting. The state of the finances of the company rather alarmed your directors, and it was suggested by them that the scale of operations should be somewhat restricted. It had been our policy, as you are aware, to push as fast as possible the trial of all the promising points that we had met with, and I think I may say that nothing was done which did not present a fair prospect of leading us to something good, but we have not had the time to do more than what we have done. We have not had that increase in the quantity of ore contained in the lode which almost everyone who has inspected the underground workings anticipated we should have before arriving at the depth we have got to. The lode is one of a very favourable and good mineral character throughout, and contains ore enough to characterise it fairly as a copper lode from which good returns might have been anticipated. It is in many respects closely resembles the lodes which in that district have been very productive and very profitable, but although we have now arrived at a depth of 40 fms. we have not got any marked improvement in the productivity of the lode. In the 40 ft. the present time there is perhaps the most promising lode that we have seen. I think Capt. Richards will be able to tell you that the lode is of good size—4½ ft. wide—and that its mineral composition is altogether good and promising. The necessity for economy to which I have alluded in the first place to what is mentioned here—that is, a suggestion as to reducing the cost of management—which resulted in my firm abandoning 100% of the 150%. We have hitherto received, leaving us merely a nominal retainer of 50% a year. A further step in the way of economy was the suspension of all the points in the driving of the 25 ft. for a time, and the 40 was commenced to be driven as soon as we were at the proper depth for it. We considered, however, that the essential work was to go as deep as our means will allow us, and therefore, the sinking of the engine-shaft has been pushed on vigorously, and with as large a number of men as could be conveniently employed in it; that is to say, with nine men divided into three parties working 8 hours each. One of our shareholders had the mine inspected by a gentleman well qualified to give an opinion, and he approved of the alteration we had made in the scale of operations, and specially urged that as large a number of men as possible should be employed in that shaft. I do not think I could employ more than nine men there to any advantage. The ground is favourable. It is in granite, without any admixture of the other rocks which we found in the upper part of the shaft. It is easily bored, and, consequently, the progress is very satisfactory, and the price at which the work is done; 25s. a fathom has been accepted by the men for the whole depth required, for the new level—12 fms.; 25s. a fathom for an engine-shaft of this kind is a very moderate price. The shaft has arrived at a depth of 6 fms. below the 40, and we may, I think, hope to finish the remaining 6 fms. to the 52 rather less than the month. The appearances are such that it is very probable we may meet with more ore in the 52 than we have yet had in the upper part of the mine. It is doubtful where the two lodes will meet; but when the junction does take place it will very probably lead to good results. I cannot suggest any change in the system of working. Everything is being done to the best of the judgement of the very capable miner—Capt. Richards—who is here. In our opinion, and in the opinion of others who have looked at the mine, there is a strong inducement to persevere. The monthly cost is brought back now to about 1500, and this is not a small sum, but the continuance of the works on the scale they have now been fixed at for a great many months, and will probably give the mine a fair trial.

Capt. THOMAS RICHARDS said that for the nature of the lode in the 40, and the changed character of the ground in the shaft he recommended the sinking of the shaft, believing that when the junction of the two lodes is met they will have a thoroughly good mine. The ground in the shaft had changed from kylla to granite, and it was the latter formation which was most productive in the old mine.

The Hon. ROBERT CURZON asked whether there was any probability of meeting with tin in depth?—Capt. RICHARDS, in reply, expressed his belief that tin would be found in depth in the old mine, and it was not improbable that tin would be discovered in the portion of the property which they were now working.

The CHAIRMAN remarked that the old workings had been abandoned for the present, but the engine was there and was kept in good order, so that the old mine could be reworked whenever it might seem desirable to do so.

Mr. BLADON said the greatest economy seemed to be practised everywhere, and great credit was due to the Messrs. Taylor, and to the directors for what they had done. The only thing for them to do was to go quietly on upon the lines indicated by Mr. Richard Taylor. (Hear, hear.)

The directors—Messrs. H. P. Hall, Edgar Figgess, and F. E. Kew—were re-elected, and Mr. James Waddell, F.C.A., the auditor, was reappointed.

Mr. H. CATTLEY STEWART, who had notified to the directors that he wished to be appointed auditor in conjunction with Mr. Waddell, offered himself for that purpose on the ground that it was desirable to have a shareholder as an auditor as well as a professional accountant.

Mr. BLADON pointed out that Mr. Waddell had audited the accounts for many years and had given every possible satisfaction, and he did not think this was a time at which they should increase the expenses by appointing a second auditor, more especially as such an appointment could have no effect in improving the position of the company. (Hear, hear.)

Mr. STEWART and another SHAREHOLDER endorsed the remarks of Mr. Bladon, and the CHAIRMAN stated that the accounts were, of course, open to the inspection of Mr. Stewart or of any other shareholder.—Mr. STEWART then withdrew his candidature.

The proceedings closed with a vote of thanks to the Chairman and directors, and to Messrs. Taylor and the officers of the company.

COED-Y-FEDW AND PANT-Y-BUARTH LEAD.

An ordinary general meeting of shareholders was held at the offices of the company, Great St. Helen's, on Tuesday, Mr. E. J. BARTLETT in the chair.

Mr. J. WOOD (the secretary) read the notice convening the meeting, and the minutes of the previous meeting, which were confirmed and signed as correct.

The CHAIRMAN said: I presume you will take the balance-sheet and the report that has been in your hands for the customary seven days as read. (Taken as read.) Very well; it is now my duty to move the first resolution—"That the balance-sheet as made up to April 30, 1883, together with the directors' and agents' reports, be received, adopted, passed, and allowed." The reports both of the directors and Mr. Prince will give you, I think, a very full account of the position of the company up to the present moment, and I and my colleagues have, I think, great reason to congratulate the shareholders on the very satisfactory condition of affairs. You will remember, in reference to the accounts, that at the last meeting we had a balance of liabilities over assets, taking out the value of the shares in reserve, of 261. 12s. 7d., and if you compare that with the accounts that we present you to-day you will see that we have a balance in our favour of 774. 13s. 4d. without taking into consideration the shares that we have in reserve. You will also notice a foot note in regard to the lead ore dressed and undressed, a few remarks as to which I shall have to make presently. Of course the satisfactory alteration in the accounts is due to the fact that since we had the pleasure of meeting you certain allotments of shares have taken place, but these have been made exclusively amongst the directors and their friends without any outside help at all, and, therefore, to that extent we have been benefited. The question came under the consideration of a recent board meeting as to whether it was desirable that there should be an issue of any further shares, and, secondly, if that issue did take place and they were to appeal for outside help, whether it should not be done at a premium, reserving to ourselves only any allotments at par. But I think after the few remarks that I shall make to-day you will agree with us that there is really at present no necessity for to-day increase our share capital. The position of the mine to-day is very satisfactory, but if the directors at any time should think it necessary, in the interests of their co-shareholders, as with a due regard to the proper development of this undertaking, to make further issue of shares, I think it is a matter of great congratulation, and certainly we should not feel justified, having regard to the condition of our property, in allotting shares to the outside public except at a premium. We have only to deplore to-day the continued depression in the lead market. We must, therefore, cut our coat according to our cloth. Very valuable discoveries have been made at the mine since we last met you, more particularly in the workings from the 107 yard at Mosley's shaft. Upon the east and west of the lode we made a discovery, which seemed likely to become so valuable to us in which we had already been disappointed. I think it is a matter of great congratulation, instead of raising the ore at a disadvantage, to make Rowland's shaft the means for the transit of the stuff from the levels to the surface, and to equip Rowland's shaft in every possible way for that purpose. Having made the discovery, we first put the necessary plant at Rowland's shaft, and it is now being carried down with the object of reaching our 107 level. Mr. Prince is very careful in the remarks he makes in his report as to the probable dates at which these important operations will be complete. I have a letter from him this morning which I think is extremely satisfactory, for he refers in it to the accomplishment of the great stage of the principal objects in connection with the advancement of this concern, and I dare say while these remarks are made I will be struck with the very rapid progress with which it has been effected. Sinking in most mines is a rather formidable undertaking. I have known in properties in Wales 125 and 151 yards having been given for that operation, and with that description of stuff to go through (the number of men you can put into a shaft being limited) months and years sometimes elapse before the sinking is accomplished and your main object achieved. But we are very differently situated; we have a soft rock to go through, and I must confess that, although I think it is a singularly adequate and accurate in his prophecies, I do not expect that he would accomplish the sinking of the shaft down to the 90 so rapidly. This, however, he tells us he has done. I am pleased to refer to this matter because we know many reports are circulated and statements made which are very sanguine, and months and months afterwards elapse before the realisation of the results spoken of. But when I can refer to this communication, showing that the sinking of the shaft down to the 90 level is complete, and that he has been enabled to set a number of men to raise a portion of the ore which has already been discovered, I think it is a matter of great congratulation. Our principal object in regard to Rowland's shaft of course is to continue its sinking down to the 107. The 107 is what we may strictly term our adit or draining alley. Pant-y-Buarth before we became its possessor yielded in times past a large quantity of ore, and the only thing that prevented our predecessors deriving a greater profit than they did from the working was that they could not go below a certain level on account of the water. Various but disjointed attempts have been made from time to time to continue the 107, or water level, away underneath all these workings, so as to extract the large quantity of ore that we know was required, and which was required, and when we came into possession of the Pant-y-Buarth property we resumed the important operation of driving the 107, and I think it is to our credit that we have by the proper extension of this level unwatered the whole set, and thereby as I expect unwatered the valuable lodes, which will give us large returns in future. Now, I dare say those gentlemen present at the last meeting will very naturally expect that after the statements then made we should show in our balance-sheet to-day a large amount of ore actually realised. I regard it as a very happy circumstance that the prognostications made at that meeting with regard to the finding of the ore are perfectly correct. If lead had been a very good price I imagine that we should have been tempted to work this great discovery at Mosley's shaft, and we could better have afforded to put up with a little inconvenience in this shaft, but as I said before with lead at a low price you must deal accordingly with the discoveries, and it is important for us to raise the lead at the lowest possible cost, and in doing so the proper way of handling it is from Rowland's shaft. We have had to wait some months so far, and we may perhaps have to wait a little longer before we can realise returns for our capital. Now, gentlemen, the position is briefly this: This string was worked by our predecessors so far as they could proceed with the 107 level, but they were prevented from working in the bottom of the level on account of the water. From the present time we can employ a larger force of men, and the facilities afforded for that labour will, doubtless, result in yielding us a profit. There are many other points referred to in the report—matters of probability. Upon every side lodes which we know contain ore in large quantities exist, without dealing with the discoveries that we have already made; and from the present condition of the property I can only say that I rejoice to occupy the position of Chairman of so promising an enterprise. And I am sure that those gentlemen who are here to-day, they could only have a faint amount of work that has been accomplished in the past, and understood a little of the underground landscape, they would readily believe that we have no insignificant property in the Pant-y-Buarth, and that long before the next annual meeting we shall be able to circulate amongst all the shareholders such a statement of results as will afford them the greatest possible satisfaction. All things considered I think we may well congratulate ourselves on the happy position we find ourselves in to-day. (Applause.)

Mr. THIRDS said, in moving the motion for the adoption of the report, commended the system of economy adopted by the board. On being put to the vote the motion was carried unanimously.

The CHAIRMAN: The next resolution, which I think should be proposed by some shareholder is that the retiring directors, Major J. C. Addison and Mr. John G. K. Burt, be, and are hereby, re-elected directors of the company. I can only say that we have every reason to be proud that we have two such gentlemen connected with the board. Major Addison is most attentive to the affairs of the company, and from Mr. Burt the company derives considerable advantage from his long experience in Cornwall.

Mr. BETTS: I have much pleasure in proposing their re-election.

Mr. CATCHPOLE seconded the motion, which was carried unanimously.

Major ADDISON and Mr. BURT having each returned thanks for this renewed mark of confidence,

Mr. BETTS, who confessed that the agent's report was Greek to him, owing to its technical character, thought that a few words dealing with present and prospective dividends would be so much easier to understand, and certainly much more pleasant reading. He hoped this would be a feature in the next report.

The CHAIRMAN: If we had fair prices for lead we should no doubt have been

to make returns before this. I am sure, however, that it will strengthen the confidence of the proprietors when I tell them that the directors are the largest shareholders in the undertaking.

Mr. BETTS: I take it that lead were at a little better price it would not be injudicious to press it to the market.

The CHAIRMAN: Having got Rowland's shaft into such a condition, we shall not trouble ourselves about the price of lead.

Mr. James S. Easta was reappointed unanimously auditor of the company for the ensuing year.

Mr. BETTS then proposed a vote of thanks to the Chairman and directors, which was seconded by Mr. CATCHPOLE, and heartily agreed to.

The CHAIRMAN: It is a pleasant duty to meet the shareholders with a favourable statement; but it is more pleasant when we have something to declare, and I am satisfied in my own mind that you will all have reason to appreciate the exertions of your directors long before we hold the next meeting.

The proceedings then terminated.

GAWTON MINING COMPANY.

The annual general meeting of shareholders was held at the offices of the company, Austin Friars, on Wednesday, Mr. GEORGE BATTERS in the chair.

Mr. EDWIN F. COLMER (the secretary) read the notice convening the meeting, and the directors' report and statements of accounts were submitted. The loss on the six months ended June, 1882, was 1287. 3s. 2d., and on the six months to end December 480. 1s. = 1767. 4s. 2d. At present the mine appears to be paying cost, and the agents are sanguine that henceforth profits will be made. The necessity for a reconstruction to raise fresh capital has arisen from the fact that the estimates of the agents have been exceeded, and the original capital (6000l.) having to some extent been absorbed by the debts of the old company. The reconstruction of the company commends itself to the directors as being the only equitable plan whereby the interests of the shareholders can be conserved. The 10s. liability will only be called up as required.

Capt. William Rich, of South Condurrow, in a special report, after referring to various points of operation, said—There are several men employed in stopping the back of the 117 as well as in the shallower parts of the mine, from which the principal supply of arsenic and copper is obtained. As I have often said before you have a great extent of unexplored ground before you in an easterly direction, and a strong mastery lode to operate on. I should advise that the driving of the bottom level be urged on as rapidly as possible, as well as another driving on the course of the lode—say, at the 80 fm. level. I have discussed with the members of your board the advisability of extending these levels by means of rock-boring machinery, and in the present state of the mine I cannot advise you just now to incur this additional expense, at least not till some further discovery is made to warrant the outlay. The muddle you are now treating contains some 15 per cent. of arsenic. I think by carefully selecting the best portions of the lode the percentage might be raised to (say) 25 per cent.; if this can be done it will materially assist in meeting the expenses of carrying on the explorations on the course of the lode east of the shaft. I consider it a good speculation to push on the driveage spoken of.

The following report of the agents was read:—

May 28.—Since the last general meeting a powerful Blake's patent stone-breaker, with a 15-horse power Robey steam-engine has been erected, for the purpose of preparing the ore and muddle for the furnaces in the manufacture of arsenic, &c. There are six large reverberatory furnaces in action, and a considerable amount of auxiliary flues attached, &c. The underground workings have been chiefly confined to driving the 70 on the south part of the lode, Cross-cutting the south part of the lode at the 80. Also driving the 95, the 105, another 117, besides sinking winzes, putting up rises, and stopping a considerable amount of the most productive part of the lode found in the levels explored from which, about 1100 tons of copper ore, and over 800 tons of arsenic have been extracted during the 12 months, and about 300 tons of arsenic in the present year, with about 450 tons of copper ore. The principal drives in the deeper parts of the mine are extended east of the engine-shaft as follows:—The 80, 113 fms.; the 95, 112-13 ft. The 105 is driven 152 fms. 2 ft. The 117 is driven 144 fms. 5 ft.—showing that all our principal drives east are pretty near uniform, and for its proper development to attack such mastery lode going away into the hill nearly 2000 ft. deep from the present bottom of the mine. We are inclined to esteem it one of the most cheering speculations that can be found in this or any other mining localities in existence, with so much valuable and expensive work already accomplished, and including the recent improvements at the 117, going away into the hill as described above, as also going down in the bottom of the mine, in a lode in places 8 and 10 ft. wide, worth 13 and 20 tons of arsenical muddle and copper ore per fathom, and I am very pleased to know by your communications that our directors have suggested such a valuable mode of action in the interest of the shareholders generally to subscribe a sufficient capital to bring the whole business into a great success.—GEORGE ROWE, GEO. ROWE, JUN.

The CHAIRMAN stated that the reports fully explained the present position of the company. Unhappily, the accounts for the first half of the year showed a loss of 1287, while the loss in the last half of the year was 480. In the period which had elapsed since the close of the accounts—about four months—the loss had been 298. This was not satisfactory in itself, but it was favourable in comparison with the loss sustained in the early parts of last year. The mine was now about paying its expenses, and there seemed to be the prospect of a better state of things. He was a considerable shareholder in the company, as were also his colleagues, one of whom held 1870 shares at the present time, and their disappointment was great or greater than that of the outside shareholders. He had given the utmost attention to the affairs of the mine, and besides visiting the property from time to time he had secured for the company the top prices for its arsenic, and he had laboured in a manner which he would hardly have done had the property been his own. They were told that if the shareholders would put up arsenic works they would have a good paying concern; but although these works had been put up the predictions had not yet been justified. As the company had come to the end of its tether, and was in debt over 2000l., the directors had had to consider what was best to be done. They had proposed what they considered an equitable scheme—to wind-up the company, and reconstruct it, fixing the capital at not less than 30,000l. in shares of 2l. 10s. each, with 2l. credited, leaving 10s. to be called up as required. In any case the debts must be paid, and even if they were determined to sell the property it would realise a much better price if it were free from debt. The present company was started with a total capital of 6000l., but a considerable proportion of that was swallowed up by the debts of the old Cost-book company. With the balance furnaces were erected and the other work had been carried on. With the assistance of Mr. Bawden the furnaces had been erected as cheaply and as perfectly as they could possibly be erected. They inherited a mine with a shaft sunk a very long distance from the course of ore; but they were told that there were stores without end. Unhappily, all that Capt. Rowe had promised them from time to time had not been fulfilled, nor had his estimates been borne out by facts. (Hear, hear.)

Capt. Rowe said he had always reported according to the value of the various points at the time of making his report. He could not see through the ground, and of course changes took place in the values of the lode from time to time.

A SHAREHOLDER said there could be no doubt that they had been greatly misled by Capt. Rowe. (Hear, hear.)

The CHAIRMAN added that instructions had now been given to Capt. Rowe to select the ores before burning them, so that they might have better results instead of simply showing large yields of ore. Some of the large shareholders met the directors six weeks or two months ago, and it was then decided that they should wait and try the result of a month's working before calling the shareholders together, and this was the reason of the delay in holding the meeting, and believing it possible that the returns would so increase as to avert the necessity of a reconstruction, but, notwithstanding this, the course now proposed would doubtless result more beneficially to the interests of the shareholders by placing the company at once in a sound and strong position. The result was that the loss had been greatly reduced, and the concern was hopeful instead of hopeless. They were now selling their arsenic at an improved price, and the prospects seemed to be more encouraging. Of course it was for the shareholders to decide upon the future course of their proceedings, and to suggest whatever changes they might think necessary, whether in the direction or in the management. The Chairman then moved the adoption of the report and accounts.—Mr. HUNTER seconded the motion.

Mr. J. C. BOLTON gave some of the details of the accounts, and said he had made separate statements for the first and second half year, so that the shareholders should see the progress of their affairs. The accounts were audited and ready for presentation by the end of February, but the directors had postponed the meeting until they were in a position to speak a little more definitely than they could have done of the future prospects of the undertaking.

Mr. HUNTER asked what would be the cost of a refinery for refining the arsenic?—Mr. BAWDEN replied that the cost would probably be from 1200l. to 1400l.

Mr. HUNTER enquired what guarantee could be given that there would be a constant supply of the raw material?—Mr. BAWDEN said no man could give such a guarantee. It was of course a speculation. Before the furnaces were erected they had been selling a certain quantity of copper ore every two months. That ore contained a quantity of arsenical muddle which they simply gave away, and were, indeed, getting a less price for their copper ore because of it. Had the furnaces been put up years ago the company would now be in a very different position. He did not advise the erection of a refinery at present. They should endeavour to work the furnaces and sell the copper ore to a profit first. (Hear, hear.)

Mr. HUNTER complained that the promises made by Capt. Rowe were quite illusory. The reports from time to time spoke of the lode as being worth large amounts per fathom; but the results showed them that the value had been largely over-estimated. (Hear, hear.)

Capt. Rowe said he could not help the lodes getting poorer. He simply reported upon the lode as he saw it.

In the conversation which ensued there was a general expression of opinion that Capt. Rowe had shown a want of proper judgment in his management of the mine, and more especially in the preparation of his reports.

The report and accounts were adopted.

On the motion of the CHAIRMAN, seconded by Mr. LESTER, Mr. J. C. Bolton, F.C.A., was re-appointed auditor.

An extraordinary general meeting was held immediately after for the purpose of passing special resolutions to wind-up the company voluntarily; to appoint Mr. Edwin F. Colmer liquidator at 10s. 10s. remuneration; and "that the liquidator be authorised to sell and transfer the property and business of the company as a going concern, and subject to the payment by the purchaser of all the debts and liabilities of the company, to a company to be formed with a capital of not less than 30,000l., for a consideration payable in 12,000 shares of such new company of the nominal value of 2l. 10s. per share (such shares to be issued as 2l. paid, and with a further liability of 10s. per share only), and that such shares when re-allocated pro rata amongst the shareholders in the present company according to the number of shares held by them at the time of the winding-up, and in the event of any of the shareholders in this company not accepting such allotment within 14 days from the date of registration of the new company, the shares not accepted be dealt with upon such terms as the directors shall deem expedient.

Mr. BOLTON suggested that the capital of the company should be fixed at £5,000, and that the balance of 20,000 shares should be held in reserve to be issued for such amount as might be required for the employment of the 50000. This suggestion was agreed to, as was the resolution as amended. A committee of conference was then appointed, consisting of Messrs. Goslett, Messrs. Proddman, Brown, and Hugh Mackay. The proceedings closed with a vote of thanks to the Chairman and directors.

BRATSBURG COPPER COMPANY.

An informal general meeting of shareholders was held at the offices of the company, Austin Friars, on Thursday, in order to afford them an opportunity of meeting Capt. Daw, the manager, who is at present in England.

Mr. J. H. MURCHISON in the chair.

Mr. H. C. MURCHISON (the secretary) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen, the notice convening the meeting tells you so plainly what the object of the meeting is, that no doubt you will be rather pleased if I do not occupy your attention many minutes, particularly as Capt. Daw is here to give you every information you may require. It is, at all events, very satisfactory to know, and I may tell you that generally the mines are turning out even better than anticipated, although our new machinery is not yet erected; and the quantity of ore broken and raised, and ready to be sent away, is very much larger than for the same period last year. When the new machinery is at work we shall do a great deal more. One point which has affected the bringing of the ore over to England, is the question of a steamer. At the last meeting we referred to this matter, and we have felt lately the disadvantage of being without one, and the advantage which would have accrued if we had had one. I may tell you that although we have a considerable sum of capital, or floating balance as you may call it, of about £10,000, yet for the last seven months we have had to advance a large portion of that in sending out money to carry on the mine, and to erect the machinery, before we could get the ore over here to be raised. But, with respect to the steamer, I am happy to tell you that we are in this position. We see our way to have it before Christmas next, so as to be running, and carrying the ore of the company before the winter. Captain Daw himself has very liberally offered to advance the money for the steamer if we should require it; but I think, and I believe, that we shall be in a position next year, out of our own resources, to pay the money. But the steamer is so much wanted that they have accepted this liberal offer of Capt. Daw, and he says the steamer will be running before Christmas next. Another point which also affects not only the rapid transit of the ore to this country, but doing it at a much cheaper rate, is that there is at present a proposal which is likely to be carried out, for the making of a canal between the two lakes. The total length of the canal will be about 12 miles. The intention is at first to make the first portion of it, about 7 or 8 miles, and when that is completed we shall save 30000, or 40000, a year in carriage. The proposal made to us is this:—The whole capital of the company for making the canal is to be something like £20,000, and the Norwegian Government funds two-thirds and the Communes the rest, and the proposal is that we should find 40000, payable at the rate of 20000 a year over 20 years. I need not enter into any figures to show that if we have 100000 a year when the first seven miles of the canal are completed, and 30000, or 40000, a year afterwards, and there will be no further expense whatever, it will be a most desirable thing to carry out. And we shall have a still further interest in the canal, because when the Norwegian Government receive 5 per cent. interest on their two-thirds of the capital, we shall participate in any surplus profit; but, irrespective of that altogether, it will be a very great saving. I need not say that it will be of very great importance to the company, not only in getting our ore over more rapidly, but also in saving a large sum of money in carriage; because, remember, that although we are getting what, in the early days of any company, would be considered a very substantial return, yet when we get the new machinery at work, the returns will be very much larger than now. (Hear, hear.) The ore now is not working, and it is not working to last for a very considerable time, but all points of the mine are still adding very considerably to the resources, and you must remember that with our present limited means, before the new machinery is erected, we cannot raise anything like the quantity of ore we are able to break. I think there are some of the best points of the mine suspended at present.

Capt. Daw: Yes; that is so. The CHAIRMAN: Because if you break the ore there are no means of raising it—fact, they are suspended on that account. I do not know that I have anything further to say; Capt. Daw can answer that, and give you fuller and better information than I can. That generally is the state of the case. The mines are opening out better than was anticipated; we have a larger quantity of ore broken and raised for the portion of the current year which has elapsed than last year. The new machinery is not erected, but we see positively before us the question of the steamer to be carried out at once, and ultimately without any burden upon this company there would be the making of the canal. (Cheers.)

A SHAREHOLDER: When the canal is completed I suppose we shall not want the steamer?—Capt. Daw: Yes, we shall want it more than now, because it takes the ore quite down to the port. The lake is 42 miles long, and now the carriage between Strangen and Bandak is 12 English miles. This nine miles of canal will take about a year to make, and we shall get the nine miles canal carriage at once; and although we pay 20000 a year for the first year, we shall save 10000 in the year in carriage, so that it will pay us well to pay 20000 a year for 20 years, and when that section of the canal is made we shall take the ore as cheaply to Skien as we now do to Strangen. If we do not use our own steamers there will be other steamers put on by other parties, and when they find that the transport increases they will put the price up at once. We hope by Christmas to get the steamer ready, and then we shall be independent of that; and the steamer, when the canal is finished, will go straight to Skien. As regards the mine, we are erecting a lot of machinery. There is one part of the mine, Xorke's lode, which is now not being worked, because we cannot draw the ore, but as soon as the steamer is ready we shall be ready to work it, and then the output will be very much larger than now, as it will really be adding another new mine. The other part of the mine, which we are now working, is the Xorke's lode and No. 2 and 3—this opening up better than we anticipated, consequently this year's produce will be very much better than the last. I do not like to say too much about it before the end of the year, but when you receive the accounts up to the end of the year I have no doubt you will find them very much better. I have talked these matters over with Mr. Murchison and the directors, and they thought it better that you should hear the statements from me. You have some property which in the course of a year you may sell if you will, or form another company to work it. We have three large mines, which are not working, and a good mine, but the capital of this company is not large enough to erect machinery for these, and, therefore, we think it better to make one mine a good one, and then at the end of the year you can consider whether you will sell the other mines or work them, and I am sure they will turn out good dividends.

A SHAREHOLDER: What tonnage will the steamer be? Capt. Daw: About 40 tons. We shall employ it more as a tug, and put boats behind it. It will take four barges.

A SHAREHOLDER: When the canal is complete can a steamer from England go up to the place?

Capt. Daw: No, only to Skien; the locks are not large enough. The town of Skien would not supply the money to allow the ships to go through; therefore, the ore must be put in barges and taken to the town.

A SHAREHOLDER: Could not a steamer be bought instead of built?

Capt. Daw: You must have it built, as it has to be taken up to the lake in pieces; it has to be taken over the road a distance of 12 miles. If I could have bought a steamer I would have bought it before I came to England.

A SHAREHOLDER: What will be the cost of the canal? Capt. Daw: About 20000, including barges. It will be solely employed in the service of the company, except that it could carry back goods for merchants. It is not intended or fitted for passengers, but if any of the shareholders should come to Norway, and wish to visit the mine, we can carry them up.

A SHAREHOLDER: Will one steamer be sufficient to carry our stuff?

Capt. Daw: Yes, with the barges; at any rate, for two or three years' time.

A SHAREHOLDER: How many months in the year the canal would be closed with ice?

Capt. Daw: I do not think the canal would be closed by ice, but the lake might be. This year the lake was closed for three months, but last year it was not closed at all.

A SHAREHOLDER: Has the ore got richer?

Capt. Daw: It is about the same—18 to 22 per cent.

A SHAREHOLDER: When do you suppose the new machinery will be ready for work?—Capt. Daw: The greater part will be ready by the end of September.

The CHAIRMAN: Everything is on the mine.

Capt. Daw: The houses are all built for it. We can scarcely say at present to what extent we can increase the returns. Our dressing machinery is running night and day, and that will be the next matter we must turn our attention to. We are building houses, so that the machinery will work in winter and summer.

A SHAREHOLDER: Will you smelt your own ore?

Capt. Daw: We cannot; it is too far to take coals up. Besides, the ore is too rich, and requires to be mixed with poorer ore to smelt with it.

Capt. Daw, in reply to a further question, said there was always plenty of water for all purposes. There were no facilities for getting the ore to Swansea. There were also two steamers running to Newcastle, so they could always send the ore to Newcastle provided they could make any fair arrangement.

A SHAREHOLDER: Are there any rock-drills amongst the new machinery?

Capt. Daw: Yes, five.

A SHAREHOLDER: Is it more profitable to sell the ore in Newcastle than at Swansea?

Capt. Daw: No, I think not. We have not such good opportunities of sending to Swansea as to Newcastle. We could send to Newcastle every month, but when we send to Newcastle we take the ore by road to the town of Skien, and at Newcastle we have to take it out again and put it into "flat" to take it up to the works, but the mode of sampling it at Newcastle is not so satisfactory as at Swansea.

A SHAREHOLDER: How did the total of ore sent home from the commencement of the mine?—Capt. Daw: We sent 14,000, or 15,000, worth last year, but we shall have more this year. We have already 12,000, to 14,000, of ore broken and lying on the mine.

The CHAIRMAN: Last year it was only 14,000, for the whole year.

Capt. Daw: We shall send you over 1200 tons, if not more.

A SHAREHOLDER: When will the machinery be at work?—Capt. Daw: Some of it in September, and all by the end of October. The turbine will be ready in six weeks.

A SHAREHOLDER: Will the turbine act upon the drawing machinery as well?

Capt. Daw: It would. The mine was looked upon as a wonder in that part of the world. Some years ago, when working the mine on his own account, he cut two places for horse-whims, and those two places had come in exactly for fixing the engine. There was no house to build, no foundations to make. There was no head gear.

A SHAREHOLDER: I suppose the object of the engine being underground is for drawing, and so on?—Capt. Daw: Yes; and it also saves sinking the shaft

70 fathoms. If it were not for this we should have to go to the top of the hill and sink a shaft.

Mr. S. YORK said he believed the mine was well ventilated?—Capt. Daw: Well, yes; we have about 2000 ft. of shaft. The levels are driven into the side of the hill, and are about 2 fms. apart. They had opened about 400 fms. in length, underground, and the engine was quite as good now as when it started, and better. The further they went into the hill and the deeper they went down the better the lode became. When they started on the top the lode was 1 1/2 ft. wide, and now it was 4, 5, and 6 ft. wide.

A SHAREHOLDER: How much is it worth?—Capt. Daw: From 12 to 13, or 14, per fathom.

The SHAREHOLDER: Does the mine unwater itself?—Capt. Daw: Nearly; we only want a small Tangey pump.

The SHAREHOLDER: When you come to the deeper workings will you want more power?

Capt. Daw: It is not like in Cornwall, where they want 70 to 100-hp. engines. Another great advantage, that we have no lords' dues to pay, and no squabbles such as we have seen at Dolcoath—we are not called upon at the end of 20 years to pay 20,000, for the renewal of the lease. We have had but little to pay for timber; so, if we are burdened with a little more for carriage, that is more than compensated by the saving in dues. We do not pay anything for water; we take all we want from the river. There is a specimen of ore from the deepest level; it is 60 per cent. ore. That specimen is very rich in silver.

A SHAREHOLDER: Does it increase in quantity as it goes down?—Capt. Daw: Yes, and we think the silver will increase also. We send over a good deal of silver, but they give us nothing for that. This ore contains 10 oz. of silver to the ton.

The SHAREHOLDER: I suppose the smelters get it out?—Capt. Daw: Certainly, but they give us nothing for it. If they have ore of 20 per cent. they get 20 oz. of silver, but they will not pay you for it; but if they get 21 oz. they will pay you for 1 oz. (A laugh.)

The SHAREHOLDER: If we smelted the ore that would be profit?—Capt. Daw: Yes, but we should have to lay down heavy plant and have electric batteries, which would also take out the gold—for the ore contains a small quantity of gold.

A SHAREHOLDER: The Cape Copper have bought smelting works at Swansea for their own use?

Capt. Daw: Yes; and when we get larger possibly we might do the same; but in that case I should propose that the works should be placed at Skien. We can get coals at Skien at 11s. per ton. We could not put the smelting works on the mine—that would be impossible—and we must bring the ore to the smelting works. If any gentleman comes out to Norway I shall be happy to meet him, and shall be happy to send one of my sons to accompany him through the country or go myself.

Mr. S. YORK: I have had the opportunity and pleasure of visiting the property, and I can certainly verify all the statements which have been made by Capt. Daw; in fact, I think he has very much under-rated the value of the property. I went into the different levels, I have visited other copper mines, but I have never seen anything approaching what I saw at this mine. A great deal has been said with respect to the Cape Copper. I consider we have got equally as large a property. It is simply a matter of time when the property will become equally as valuable as the Cape Copper. In the Cape Copper they had a large amount of machinery, at Bratsberg they had none at present at work. The turbine, when completed, will give all the power which will be necessary for the whole of the operations. No matter to what depth or to what extent we may drive out in the hills there is no doubt the deeper we go the richer will be the ore, and the greater its extent. In extending with the hill it improved every few fathoms. The wonderful confidence which Capt. Daw has in the property is shown by the fact that he has offered to purchase the steamer himself for the benefit of the company. (Hear, hear.) It reflects great credit upon him, it is a satisfaction to the board of directors, and I am sure it must be pleasing to the whole body of shareholders that Capt. Daw had acted in the very handsome manner he had done. (Cheers.)

A SHAREHOLDER: When you get the steamer up how far will it be from the mine?—Capt. Daw: About nine miles. Although that looks a good deal, yet taking the value of our ore and comparing it with Cornish ore—most Cornish mines have to cart their ore four, five, and eight miles, and the percentage of the Cornish ore will average about 5 per cent., whilst ours averages 20—so that if you take that into account you will see that even then our transport is very little compared with theirs.

A SHAREHOLDER: Asked whether the country between the mine and the lake was suitable for the construction of a railway or tramway?—Capt. Daw said it was, and probably he should ask the directors to make a tramway, but not yet.

Capt. Daw, in reply to a question said he had been speaking of English and not Norwegian miles. The distance would be about 1 1/2 Norwegian miles. He might mention he worked the mine himself four years, and paid the old Bratsberg Company 1/4 the dues; then the price of copper went down, and he asked them to make it 1/10th, which they did. He worked the mine himself for four years on tribute. The remarkable part was that when he was working it on tribute the men did not take away the whole of the ore, for the more they worked the more they discovered. The present company had made more than a 5 per cent. dividend in the first year. That shows the value of the mine, which speaks more than all the rest put together, and in the past year they had discovered three times as much ore as they took over. (Cheers.)

Mr. CLAPMAN: What are the reserves?

Capt. Daw: I estimate the reserves at over 200,000, at the present price of copper. As long as copper does not go lower we can pay a good dividend. I worked the mine for four years at the price of 54, per ton, and paid a good dividend. Now the price of copper is 62, to 63.

A SHAREHOLDER: When we get the canal finished you could afford to let the price of copper go lower.—Capt. Daw: We could afford to let it go down to 58, or 59. We have another little property—I call it little—which is not far from this, about half an English mile. Its lode is quite different from the lode we are now working on. It is about 10 ft. wide, carrying copper and silver. The pure copper is 80 per cent., and when you get pure silver of 80 per cent. there are 200 oz. of silver to the ton of ore. It was not worked by me, but it was worked by the old company at a profit, but they could not raise money to put up machinery. I offered 10000 for this small property, but they did not appear to take the offer. We thought that during the coming winter, when we take the horse-whim out of the mine, we would put it on this Nesmark property and work it, and bring it up little by little. We shall want a matter of 20000, or 30000, worth of machinery for this mine. If we work it little by little it will not be felt by the present company; and in the course of a little time we shall be able to bring it into play, and I am sure it will be a great asset to the company. It should be sold, by always kept by the present company. We have another property called Guldness, which I recommended should be sold. We have another large property, with a very large forest, on which the old Bratsberg Company spent 30,000 in making roads and building houses, and that killed the company. There are houses for 200 workmen, built of the best material, with a splendid house for the manager and another for the engineer. This property is 50 miles from our mines, and it is impossible we can manage that. Therefore, I recommend that that property, at a suitable time, be sold—all of it.

A SHAREHOLDER: It could be made a good mine with capital.

Capt. Daw: It is a quarry; the lode is 100 ft. wide, with a little copper scattered over the whole lode.

A SHAREHOLDER: What capital will be necessary to develop that?—Capt. Daw: I would not recommend a large capital to be spent at first, but only a shaft sunk to the cross-cut, in order to see where the ore concentrates in depth. My opinion is that it will not pay unless the ore concentrates more. The old company only worked the surface; they did nothing below the level of the lake. But it appears to me, from the old workings, that this was worked by Christian of Denmark 200 years ago, and they went down, but the old Bratsberg Company never went down. All this money was spent before I went to Bratsberg.

A SHAREHOLDER asked whether the board had considered the desirability of selling the Guldness property, by which capital could be obtained to develop the other mine?

The CHAIRMAN said the board considered the time had scarcely arrived to take any step with respect to that. The present time was not favourable to take any such steps, but they were not to be taken until the value of the mine they were now working they were more likely to find customers for the rest of the property. The directors had talked about it, but no serious idea had been entertained of carrying it out at present.

Capt. Daw said the operations at Bratsberg had attracted so much attention in Norway that Norwegians were mining within seven miles of the mine. The Norwegians were sea-faring people, and did not believe in putting their money underground; they preferred keeping it on the top, but they had now started mining within seven miles of Bratsberg.

Capt. Daw, in reply to a question that at the present price of copper the profit on a ton of ore was about 40. The price of copper was better now than a month ago by about 10 per cent. The best proof of his confidence in the mine was that he had never sold a share, and he now held over 2000 shares. (Cheers.)

Mr. SLOES said he wished to pay a tribute of respect to Capt. Daw for the clear, lucid, and most pleasant statement which he had given to the shareholders. (Hear, hear.) He proposed a vote of thanks to the Chairman for his very courteous conduct in the chair.—The motion was carried.

The CHAIRMAN acknowledged the compliment, and proposed a very cordial vote of thanks to Capt. Daw. He referred to independent testimony which he had received as to the great value of the mine; and, as regarded the Nesmark Mine, said he hoped the directors would be able to work that from the resources they had.—Mr. SLOES seconded the motion, which was carried.

Capt. Daw acknowledged the compliment, and the meeting broke up.

SORTRIDGE COPPER COMPANY.

A special meeting of shareholders was held at the offices of the company, Austin Friars, on Tuesday.—Mr. H. S. STRACHAN in the chair.

Mr. C. HARRISON SMITH (the secretary) read the notice convening the meeting.

The CHAIRMAN: The notice calling the meeting no doubt has created alarm in the minds of many when it is mentioned that the meeting is summoned with a view to winding up. But that was not the intention so much as to induce those members who take an interest in the company to come here, so that we might ventilate the question as to the desirability of either finding more money to reach the Great North tin lode, or failing to do that to wind up the affair. I should have liked to have seen more shareholders present, because when I take you back a couple of months, to the time the meeting was held on the mine, you will remember that the prospects stated at that meeting by Capt. Skewis and the other officials led one to believe that with a little more money in the course of a few months we should reach what was known as the Great North tin lode. There was no doubt about there being tin there, because the landlord had already seen it and raised from it something like 5000, worth of tin. It was known at that yearly meeting that we were short of funds, but the prospects were considered so favourable that all the shareholders who were then present were so unanimous in their opinion about the desirability of raising fresh money that they one and all agreed to take their pro rata proportion of new shares. The result has not proved so promising as we were led to expect, inasmuch as out of all the members then present I do not believe more

than two or three have kept their promises. Such being the apathy of the shareholders it now becomes a question whether it is really desirable to find more money, so that in course of a few months we may know whether we have this great success that we are led to believe exists there or not. It appears to me that, having spent so much money on the mine, and having been within a very short time of reaching this particular spot, it is a great pity that we should sacrifice the property for a few hundred pounds, when it will only result to the benefit of those parties who will come in very likely and secure the mine at a low price. I am not a practical miner, but, from what I hear, if you decide to let it be wound up, there are those who will step in and reconstitute it in some shape or form. I believe in the property, and the chances are, if you will only make a little further sacrifice of money, it will be attended with success. Financially, I have done my best. I have found money to pay even the labour costs this time, and the previous time I did so too. By death and resignation you have only two directors left, and we have done all we can. It is now for you to say whether you will lend us help to reach this point about which we are so anxious. Mr. Skewis, our landlord, is here. He is the only party who will be benefited by the winding up. He has counselled me and everybody connected with the mine that it will be injudicious to close operations. He urges us not to wind up. He believes that we should be amply repaid for all the money we have laid out. I am very glad he is present, because he will give you information that may possibly be useful. If you decide to subscribe your proportion of the new shares, the directors have made up their minds to be as economical as they can, and to commence by reducing the official expenses. We have now cut down the expenses to such an extent that, instead of labour and materials costing 1500, to 2000, a month, we shall reduce it nearly one-half. We at this moment have promises to take up 807 shares, leaving 93 shares to make up the 10000. Mr. MURCHISON: I would simply remark that the Great North tin lode has been extensively worked down to the 20 ft. level, and we have only to drive the cross-cut a few fathoms to reach it at the 40.

The CHAIRMAN said that the landlord finding they were short of money volunteered to pay the miners himself. He did not think that any other landlord in the kingdom would have done that.

Mr. Skewis: I shall have very much pleasure in trying before you all the information I can. I am not a practical miner. I was born on the spot, and have lived there all my lifetime, and was associated with the old company. I have been underground some thousands of times, and in regard to the Great North tin lode the fact is this—directly behind the account-house there are open workings which extend for some 500 or 600 fms. in length. This was worked by the ancients, but has never been worked within living memory. The ancients went up with an open cutting, and evidently had a large deposit of stream tin. Finding that they were getting deeper they went back to the foot of the hill and brought in an adit level which intersected the Great North tin lode 20 fms. deep. From this they must have taken thousands of tons of stuff away. They began to sink a shaft below the 20, but the water overpowered them. This has always been a favourite point in the neighbourhood, and is characterised by the name of the Great North tin lode. The old company drove a cross-cut from the 40 to intersect this tin lode 20 ft. deeper than ever it was seen by the ancients. From one cause and another they failed to do so. They were very rich for copper, and had no tin machinery, and so probably did not wish to deal with it. A portion of the cross-cut is out of repair and will require to be cleaned up. When that is cleaned up to the extent of what the late company did you will have to drive a short distance before you intersect the Great North tin lode, as to the existence of which I have no doubt. What it may be worth at the 40 is not for me to say, but it exists there, and you must drive to find it, and if it should be cut rich you will have 20 fms. of backs available for stopping.

The CHAIRMAN: How long will it take to get there?—Mr. Skewis: That is a question of management on which I cannot offer an opinion.

A SHAREHOLDER: Capt. Skewis said 1000, would take us there.

Mr. Skewis: I have no royalties, or anything of the kind until 60,000, worth of ore is sold. Tin is a collateral branch of our operations entirely. The company was not formed with the object of prosecuting for tin. The great fame of their company (for it was so famous that for some years there was almost nothing else dealt in on the mining market but Sortridge shares) was made with copper, which was very rich in produce. The Devon Consols directors were the principal people connected with it. It occupied a very important position amongst the mining enterprises of its day; but it was worked for copper, and it was on the cross-cut of the cross-course that all this copper was found. One object when this company was formed was to work at the west of the cross-course, where the lode presented similar features to what it did at the east. We sank a certain depth, and because we were stopped by water we did not go on for we then heard of the tin lode.

The CHAIRMAN said that, although he had a stake of 15000 in the company, he was still prepared to go on.

Mr. STEWART suggested a scheme of debentures, but met with no support. He pointed out that a 1000 note from each shareholder would give the company a capital of 100,000.

A SHAREHOLDER suggested with general approval that the unallotted shares should be issued before debenture should be thought of. Let each of the shareholders take up his quota of shares.

Mr. Skewis: Though I would chiefly benefit by the stopping of the mine by the present company, as I have reminded you already, I would do all I can to assist the company, and prevent any suspension of the operations. (Hear, hear.)

Mr. Geo. Brown lately had a conversation with Capt. Skewis, who said that this was one of the best properties in the Tavistock district. It was most important to continue the operations, and, therefore, he would subscribe more shares, and do all he could to help.

Mr. SIMMONS had responded when the first circular was issued, and looking at the value of the property, and the great liberality of the landlord, he was much surprised that more shares had not been taken.

The discussion was prolonged for a considerable time, and in the end the 1000 shares asked for by the board were taken up, and the resolutions for liquidation were not proceeded with.

A vote of thanks to the Chairman brought the proceedings to a close.

HORNACHOS.—At the meeting on Wednesday (Mr. H. C. Scott in the chair) a provisional balance-sheet for the 18 months to end December was submitted, but has not been forwarded for publication or abstract. The Chairman explained the present position of the company's affairs, and stated that in the absence of complete accounts from the mines, owing to the large amount owing for costs and of the inventory of stores in hand, the present balance-sheet had to be compiled from the London books only. After a discussion upon the general state of the affairs of the company, during which there was a strong expression of feeling by some of the shareholders present respecting the excessively large salary of 10000 per annum paid to the London manager who was allowed to resign the post, and to go unpaid the accounts were unanimously received. It was proposed by Mr. S. R. Rattison and seconded by Mr. B. Jolly, that those shareholders who are unable to take up their proportion of the new 10 per cent. debentures should surrender 20 per cent. of their holdings to the directors, to be distributed by them as a bonus to those who are willing and able to take up the new debentures, which was carried unanimously. Mr. S. Loveridge was re-elected a director, and Mr. George Heiron was re-elected. Mr. Richard Jolly was unanimously elected to seats on the board, in the place of Mr. A. Parisot and Mr. Arthur Edwards, resigned. The auditor was also re-elected.

THE COPPER TRADE.

Messrs. HARRINGTON, HORAN, and Co. (Liverpool, May 31).—Chili copper charters for first part of May were advised on May 1 at 1100 tons, all bars and ingots, of which 150 tons for England, and 950 tons for orders here or Continent. Price of bars was \$18-07 1/2, and exchange 34 1/2. Charters for second part of the month are now due. During the past fortnight Chili bar market has experienced sharp fluctuations, commencing at 67 1/2 spot, sales were made down to 61 1/2, from which figures a good business was done up to 64 1/2, afterwards a reaction took place and prices steadily fell to 62 1/2, 61 1/2, and 60 1/2, which there has been a good demand for spot, and prices, after touching 63 1/2, 62 1/2, close easier at about 63 1/2. 10s. spot, and sellers of forward at 64 1/2. The business in furnace stuff, which has been considerable during the same period, comes as follows:—At Liverpool: 845 tons Chili regulus, just arrived per Vigil, 60 tons to arrive per La Escocea, and 50 tons to arrive per Esmeralda, all at 12s. 6d., 70 tons just arrived per Esmeralda, at 12s. 7 1/2 d., 110 tons to arrive per Esmeralda, at 12s. 4 1/2 d., and 80 tons American at 12s. 6d., 300 tons Mexican ore, and 42 tons Peruvian at 12s. 1 1/2 d., 120 tons Italian ore (low produce), and 1000 tons Betta Cove ore to arrive, at 11s. 9d., also 750 tons spot, and 100 tons Italian ore, just arrived (low produce), at 12s.—At Swansea: 504 tons Chili regulus, ex Emily Waters, at 12s. 6d., 936 tons Quebrada regulus at 12s. 3d., 950 tons Rio Tinto regulus at 12s. 6d., 500 tons Quebrada yellow ore at 12s., 1179 tons Quebrada ruby ore, and 1100 tons Australian ore (Montana) at 12s. 3d., 1100 tons Capote ore at 12s. 4 1/2 d.—Precipitate: 750 tons Huacana at 12s. 4d., 500 tons Mason's Spanish at 12s. 5d., 500 tons Rio Tinto at 12s., and 250 tons English at 12s. 6d., to 12s. 8d. per unit.

Import of Chili copper during the past fortnight, 1348 tons fine, against 1719 tons fine same time last year; delivery, 1813 tons fine, against 2470 tons fine same time last year; import of other copper during the past fortnight, 3288 tons fine, against 1047 tons fine same time last year; delivery, 2830 tons fine, against 938 tons fine same time last year. Arrivals here during the fortnight of West Coast S. A. Produce:—Tafna, from Lota, 150 tons bars; Antofagasta, from Valparaiso, 280 tons regulus; Yacuata, from Pisco and Lota, 42 tons ores, 250 tons bars; Victoria, from Valparaiso, 7 tons regulus, 140 tons bars; Vigil, from Carizal, 845 tons regulus; Charwood, from Valparaiso, 70 tons regulus, 245 tons bars; Chiloe, s.s., from Valparaiso, 40 tons regulus. At Swansea: Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, we estimate at—

	Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	455	16,779	444	—	—
Swansea	3,573	7,511	—	—	—
Total	4,028	24,290	444	—	—

Representing about 26,547 tons fine copper, against 27,016 tons May 15; against 23,782 tons May 31, 1882; 30,635 tons May 31, 1881; 31,810 tons May 31, 1880. Stock of copper contained in other foreign ore and Spanish precipitate, 3288 tons fine, against 2226 tons May 31, 1882. Stock of Chili bars and ingots in Havre, 2012 tons fine, against 2572 tons May 31, 1882. Stock of Coro Coro Barilla in Havre, — tons, against 53 tons May 31, 1882. Stock of copper other than Chili in Havre, 165 tons fine, against 255 tons May 31, 1882. Stock of Chili

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BRITISH MINES.

BEDFORD UNITED.—N. Trezise, May 29: North Lode: There is no change in the 115 east. The 103 west is worth 12s. per fathom. The stope behind the end is worth 8s. per fathom. The tribute pitches are about the same value. —M. Callan's Shaft, Bridge Lode: The 62 east is very promising, lode strong and mately in appearance, and giving out water freely, composed of capel, munda, and spotted with ore. The 62 west is without change. The 42 east is very promising, lode 4 ft. wide, and worth 12s. per fathom. The 30 east is without alteration. The winze sinking below the 30 is down 2 fms., lode 3 ft. wide, composed of capel, spar, and munda. The several stops in the back and bottom of the level are without change. The lode in the 23 east is much the same in appearance and value. We have sampled 123 tons of ore for the past month.

BLUE HILLS.—S. Bennetts, R. Hurds, H. Grips, May 30: The lode in the 65 east end continues to look promising, and is worth 7s. per fathom. On the Balduh lode the 51 east and west ends are producing low quality tin stuff. The 42 east end is worth 6s. per fathom. In the 31 east end the lode is small, and at present not of much value. The Gumpas adit west end is worth 4s. to 5s. per fathom.

BWLOH UNITED.—W. Northery, May 30: I am pleased to state that the heavy rain on Monday night, and the accumulation of water in the large reservoirs, have enabled me to restart our machinery, which is now working at full speed; but, unfortunately, the weather still continues very dry, although favourable for gas-tarring and whitewashing the buildings, &c. The men are busily engaged in selecting, tramming, and drawing the orestuff, and I hope to be able shortly to resume the drainage at the 100 fm. west. The pumping, drawing, and dressing machinery in good order, and working well.

GARNARVON COPPER.—J. Roberts, W. Darby, May 29: In the cross-cut at 45 (Grey cross) a small slide has come in across the end, and has partly cut out the ore, but the appearance of the ground through the slide is very kindly, and in the bottom of the end the ore has again commenced to improve. We have driven here between 2 and 3 fms. The pitch at the 20 (Garnon's) is much the same value as reported last week.

COLLACOMBE CONSOLS.—W. Skewis, May 30: The men are making good progress in clearing the 55 west, and every effort is being made to reach the end as quickly as possible. We shall commence driving east, and west next week on the lode discovered in the 40 cross-cut; worth 6s. to 10s. per fathom. All the machinery is in good working order, and the work generally throughout the mine is proceeding satisfactorily.

CUNWAY VALLEY FRESHOLD COPPER.—H. B. Vercoe, R. Edwards, May 31: The 12 is driven north from engine-shaft a total distance of 3½ fms. on the western or footwall portion of the lode; the whole drive has produced a mixture of copper ore, and there is a splendid-looking lode in the forebore to-day; the leader or rib on footwall continues to produce good ore. We have yet about 8 fms. to drive to reach underneath the No. 2 sump where the rich ore is gone down in the sole of the 20, and another favourable feature is that the ground is softer than I have ever seen it in the mine, and I have been enabled to let a contract to drive at 6s. per fathom until the end of June. The 43 is driven south from engine-shaft 3½ fms.; the lode in the end is hard, it contains a mixture of ore; let at 9s. per fm. As we advance in this level we may expect both softer and more productive ground. A sump has been commenced in sole of the 20 south, where the lode is 3 ft. wide, well mixed with copper, the whole being good quality stuff for crushing and dressing. The dressing of ore is being pushed on, and we shall soon have a parcel for sale. I expected by the end of June to have important news to communicate, as by that time the 42 north will be well advanced towards the richest ore ground; and, beside, we shall then commence cross-cutting the lode to its full width, and lay it open for stoping.

CREIGIOG.—H. Hotchkiss, May 30: The only change worthy of notice in our underground workings is in the 130 cross cut, going south at Meadow shaft; here we have tapped a small feed of water in this end, although the ground is without change to notice. This is a favourable sign that there is more lode standing to the south of the present end. To-day we are commencing to divide, case, and fix ladders in this shaft from surface to the bottom, a depth of 133 yards. Until this work is completed nothing further will be done in this shaft in way of breaking ground, as I have taken all these men to do this work.

OSW DRYFOR AND BRYNARIAN (Brynnarian Mine).—John Davies, May 30: Joseph's Level: According to your instructions we left the branch and began driving this level due south.—Parnau: The lode in the 2 driving north looks very promising; we find small strings of lode in occasional places, but not as yet worth driving.

CWMSYFETH.—J. B. Roscoe, May 30: During the last week the winze below Gills' lower level on the new lode has been sunk 2 fms. in an open lode;

worth quite 3 tons of blende and about 5 cwt. of lead ore per fathom. The winze is now sufficiently deep to communicate with the stope over the 15, but as it is somewhat east of the stope a fathom or so will have to be driven in that direction, which, according to contract, the tributers will have to do. I have now suspended the winze, and put the men to make the level good to the western joint. When this is done we shall be in a good position to set a stope going over this level in a valuable lode. There is very little change in any of our tribute pitches. Owing to scarcity of water we have done very little towards the dressing of halvans, but have been forcing the dressing of the tributers' stuff, which, with the number of hands we have been able to employ of late on the dressing-floors, has somewhat accumulated. The weather still keeps dry, without the least signs of a change; consequently we are unable to sample more than 18 tons of lead ore yesterday, for sale on the 12th prox.

DERESBY MOUNTAIN.—J. Roberts, W. Sandoe, May 30: The lode on the hanging side at No. 6 continues to open out very well, and keeps its value much the same as we reported last week; worth about 2½ tons of lead to the fathom. The hanging-wall being very heavy, we have had to take down a great piece of it in order to make the place secure for the men to work. The stopes throughout are very much the same as they have been for sometime past, with the exception of the stope in the bottom of the No. 5, which is improving as we get down nearer to the lead we left to stand in the rise. We are pushing on the dressing and all operations as fast as possible.

DEVON FRIENDSHIP.—F. Daw, May 31: Setting Report: The 42 fm. end, west of Bennett's engine-shaft, is set to four men, at 10s. per fathom; the lode is 4 ft. wide, and worth for arsenical munda 20s. per fathom. No. 1 stope in the back of this level is set to two men, at 4s. per fathom; the lode is 3 ft. 6 in. wide, and worth about 15s. per fathom for arsenical munda. The 42 fm. end, east of Bennett's engine-shaft, is set to two men, at 7s. per fathom; the lode is 3 ft. wide, and worth 12s. per fathom for arsenical munda. A new stope in the back of this level set to two men, at 3s. 6s. per fathom; worth for arsenical munda 10s. per fathom. The No. 2 stope in the back of the 30 fm. level is set to two men, at 2s. 10s. per fathom; the lode is 7 ft. wide, and worth 8s. per fathom. Floyd's stope, west of rise in the back of this level, set to two men, at 2s. 5s. per fathom; the lode is 3 ft. 6 in. wide, and worth 7s. per fathom for copper and arsenical munda. Rickard's stope, in the back of this level, is set to two men, at 2s. 10s. per fathom; the lode is 4 ft. wide, and worth 6s. per fathom for arsenical munda and copper. Driving and stoping west of ladder winze set to two men, at 2s. 15s. per fathom; the lode is 5 ft. wide, and worth 12s. per fathom. We have sent off another 50 tons of arsenic, and next month we shall sample a small parcel of copper ore. The dressing machinery is working highly satisfactory, and we send you by this post samples from each jigger.

DRAKEWALLS.—M. Bowden, May 31: Setting Report: The rise in the back of the 20, west of engine-shaft, to four men, at 4s. per fathom. The stope in back of ditto, to six men, at 3s. per fathom. The stope in bottom of ditto, to four men, at 2s. 15s. per fathom. The 40, to drive west of engine-shaft, by four men, at 3s. 5s. per fathom. The same level to drive east of Mathew's shaft, by two men, at 7s. per fathom. Two stopes in the back of the deep adit, east of Mathew's shaft, to eight men, at 3s. per fathom. The deep adit level to drive west of Mathew's shaft, on a south branch, to six men, at 5s. per fathom; these men to assist the pitman when required. Two men driving a cross-cut at the 60, east of Mathew's shaft, to reach the great Gannons on the north. Rich has improved the air in the former workings; the men employed there will now work the ground on tribute at 4s. a big other being without change.—Derwent Level: We thought to have got through the run this week, but the water has been tapped, and the force of it brought away the west side of the drive, which has retarded our operations at this point. The new engine house is going on satisfactorily; we have a full force of men on it. Dressing going on as usual.

HERODSFOT.—P. Temby, J. A. Temby, May 31: Setting Report: The engine-shaft to sink below the 215 level by six men and three boys, at 15s. per fathom; the lode in the shaft is 3 ft. 6 in. wide, and quite a white iron, munda, and silver-lead ore; this shaft will be completed in the 22s. as soon as possible, when driving will be commenced in the lode east, where there is a big run of rich ore ground, proved in the levels over. The 215, to drive south, by four men, at 70s. per fathom; the lode has fallen off a little, is now producing 15 cwt. of rich silver-lead ore per fathom. A stope over the 215, south of No. 3 winze, to four men, at 40s. per fathom; lode producing 18 cwt. of rich silver-lead ore per fathom. A stope over the 215, north of No. 3 winze, to four men, at 40s. per fathom; lode large, producing from 20 to 25 cwt. of rich silver-lead ore per fathom. A stope over the 215, north of No. 3 winze, to two men, at 25s. per fathom; lode 2 ft. wide, and producing 12 cwt. of like quality ore per fathom. A stope below the 205 to four men, at 2s. per fathom; south of No. 2 winze; lode large, and producing also 12 cwt. of same quality ore per fathom. A stope in the bottom of the 205, south of No. 1 winze, to two men, at 40s. per fathom; and producing 15 cwt. of similar quality ore per fathom. 117 level, to drive south, by two men, at 50s. per fathom; here the lode is showing indications of opening out a good lode as we get away from the disturbing influences of the slide.

HERODSFOT.—P. Temby, J. A. Temby, May 31: Setting Report: The engine-shaft to sink below the 215 level by six men and three boys, at 15s. per fathom; the lode in the shaft is 3 ft. 6 in. wide, and quite a white iron, munda, and silver-lead ore; this shaft will be completed in the 22s. as soon as possible, when driving will be commenced in the lode east, where there is a big run of rich ore ground, proved in the levels over. The 215, to drive south, by four men, at 70s. per fathom; the lode has fallen off a little, is now producing 15 cwt. of rich silver-lead ore per fathom. A stope over the 215, south of No. 3 winze, to four men, at 40s. per fathom; lode producing 18 cwt. of rich silver-lead ore per fathom. A stope over the 215, north of No. 3 winze, to four men, at 40s. per fathom; lode large, producing from 20 to 25 cwt. of rich silver-lead ore per fathom. A stope over the 215, north of No. 3 winze, to two men, at 25s. per fathom; lode 2 ft. wide, and producing 12 cwt. of like quality ore per fathom. A stope below the 205 to four men, at 2s. per fathom; south of No. 2 winze; lode large, and producing also 12 cwt. of same quality ore per fathom. A stope in the bottom of the 205, south of No. 1 winze, to two men, at 40s. per fathom; and producing 15 cwt. of similar quality ore per fathom. 117 level, to drive south, by two men, at 50s. per fathom; here the lode is showing indications of opening out a good lode as we get away from the disturbing influences of the slide.

EAST BLUE HILLS.—Bennetts, W. K. Mitchell, May 30: During the past month there has not been much change to notice in the lode in the adit east end, the ground being probably too easy for driving for the lode to be productive. It continues to yield some tin stuff, but not of much value. The stopes, however, in the back of this level have been satisfactorily productive, and have averaged from 8s. to 9s. per fathom, although at present the average is not quite so high. Both the 30 and 40 east end are producing some low quality tin stuff. To-morrow we expect to sell nearly 4 tons of tin, as the result of the past four weeks' working.—Tin sale, 4 tons, 17 cwt. 17 lb., worth 8s. 8d. per cwt. **EAST BUTLACK.**—George H. Eustice, Thomas Trahair, May 30: The shaft on the new lode is now down 5 fms. 1 ft. below the level; lode quite equal to what it has been at any former period. We yesterday sampled the lode taken from the last 3½ fms. sinking, the whole of which produced 1½ cwt. of tin per ton of stuff. The water, however, has increased so much as to necessitate the getting the engine to work as quickly as possible; we are, therefore, obliged to suspend the sinking of the shaft for a few days in order to fix the pitwork, &c., which the men are engaged doing with all speed. No change of importance to notice in the lode.

EAST DARREN.—T. Garland, May 30: In the 92 end west the ground is rather stiff for up-ping, small branches of carbonate of lime containing spots of lead are often met with, but have not yet intersected the lode. In the 80 end, west of stope the part of lode carried for 5 ft. wide is hard for exploring, and contains a good mixture of lead ore, worth 1½ ton per fathom. In the 65 end, west of Vaughan's winze, the lode looks more promising, being stronger, and shows more lead, very good saving work for dressing. The stopes over the 92 and 80 are without change calling for remark. Our supply of water continues to be small, and the reservoir is getting low; we hope soon to see a heavy fall of rain, so as to have a full supply of water for pumping, drawing, and dressing. We sampled yesterday (Tuesday) 25 tons of silver-lead ore, for sale on the 12th prox.

EAST LONG RAKE.—H. B. Vercoe, T. Davies, May 31: We have the new fan machine complete and at work; it answers admirably, and has thoroughly ventilated the 60, and the drive has been resumed. The lode in the end is 8 ft. wide, of a splendid composition for the production of lead in quantity, and there is now a good mixture of ore on the north side of the level; this will, doubtless, continue to improve as we drive under the ore ground proved in the 50, and which produced from 1 to 4 tons of lead per fathom. The lode in the 40 west produces fair quality stuff for the dressing-floors. The rise in the roof of the 50 east produces fine lumps of ore occasionally. We have commenced a trial sump in the sole of the 50 west, in the flat; here we have very promising ground, precisely similar to that of the flats in Prince Patrick and North Hendra Mines, which have paid large profits for many years. We are busily engaged preparing a parcel of ore for the market, and shall have it ready for sale by the middle of June. Our confidence in the ultimate success of the mine remains unabated, and we believe that the 50 fathom level east will soon open into a good course of ore.

GLASGOW CARADON CONSOLS.—William Taylor, William J. Taylor, May 21: The shaftmen have fixed b.b. &c., at the 70, and have now commenced sinking below the 114 for bearings and cistern in order to fix standing lift at that level.—South Lode: The 114 east is without much change, producing stones of ore. Stopes in back of this level worth from 10s. to 12s. per fathom.—Harvey's Lode: The 114 east is not looking quite so well, worth 6s. per fathom; we expect this will improve again soon. In the 114 west we have out in north and south final part of the lode on either side, producing good ore. We now think it best to go on with the middle part, the others will apparently unite with this further on; present end worth about 6s. per fathom. Stopes in the back of this level varying in value from 8s. to 14s. per fathom. The 91 west is worth 5s. per fathom. In the 90 west the north lode is worth 10s. per fathom. We have a small cross-course here which rather disorders the lode; we expect this will improve shortly. Stopes over this level worth 10s. per fathom. No change to notice in the tribute pitches since our last report. It is very important to keep the lode in the 90 west in the interest of the 91 west, but as soon as possible; also to cross-cut north on the north lode.

GOODEVERE.—R. Knott, May 30: Setting Report: Higher Shaft: To drive the adit end east by two men, at 10s. per fm., stent 1 fm. We have at present a hard bar of ground in this end, which, I hope, will soon give place to ground more easy for progress, when I have no doubt the lode will be found more productive of tin. To drive the 10 east by four men, at 7s. per fm., stent 2 fms.; lode 5 ft. wide, with a kindly appearance of an early improvement.—Engine-shaft: To stop the bottom of the 10 east, stent 10 fms., by 4 men, at 2s. 10s. per fm. Lode 4 ft. wide, producing saving work for the stamps.

GREAT HOLWAY.—W. T. Harris, May 31: Roskell's Shaft: In the 95 north the level has been extended 2 fms. 5 ft. 6 in.; the ground is about the same in character as for sometime past. Within the last few days a favourable change has taken place; better progress is being made, and the lode is dipping more vertical, and the general appearance most encouraging for a further change. Water also issues from the forebore, set to six men at 9s. per fathom. In the 80 west the cross-cut south has been extended 1 fm. 5 ft., and driven west upon the course of the lode 3 ft. the latter is 1 ft. wide; blende impregnated with lead, and fair progress is being made; reset to six men at 12s. per fathom. We purpose shortly to resume driving this level east, which will be reported in due course.—Brammock Shaft: In the 60 the pit in the bottom east lode is favourable for progress, being 2 ft. wide, yielding stones of lead and 2 tons of blende per fathom; set to six men at 160s. and 40s. per ton respectively.—Office Shaft: In the 61 west, stoping in the back, has been continued with paying results; the lode at present is worth 15 cwt. of lead and 1½ ton of blende per fathom; the course of the lode 3 ft. the latter is 1 ft. wide; blende impregnated with lead, and fair progress is being made; reset to six men at 12s. per fathom. 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NEW VAN CONSOLES AND GLYN.—H. B. Verco, D. Douglas, May 31: In the cross-cut driving south in the 70, west of Murray's shaft, the lode contains much quartz, in which we find occasional spots of lead; its appearance has improved, and as we have an immense width of lode yet to cut through before the hanging-wall is reached, we look for an increased yield of ore as the drive proceeds. In the 50, east of Murray's shaft, we are straightening the old level at point of communication with the new one. This work should be complete in a few days, when the drive of the main level east in the lode towards the Glyn and Van Mines will be commenced where the prospects of discovery are good. This is a very interesting point, and nothing has been done in the lode in this direction for some years past. The lode in stope in roof of 50, west of Murray's shaft, produces 1 ton of lead per fathom. The lode in stope in roof of intermediate level, west of Murray's shaft, produces 15 cwt. per fathom. The stope in roof of 40 we are cross-cutting north; several strings of ore passed through from 1 to 2 in. in thickness. This trial is opening out paying ground, while other two trials in the 40 are producing 8 and 10 cwt. per fathom respectively. We have 13 tons of ore dressed towards next sampling—this independent of the slime, the arrangements for treating which are not yet complete; and according to present prospects we shall go on increasing. The 50 west of Glyn's and other points without change to notice.

NORTH BLUE HILLS.—S. Bennetts, May 30: The portable engine arrived on the mine on Monday evening. Work once proceeded to get it into position, fix the necessary pitwork, &c., and hope soon to get the shaft drained.

NORTH BUSY UNITED.—John James, May 31: The rise in back of the adit level is producing blende, copper, and tin—a very kindly lode. In the 15 east we have met with some stones producing tin, but by the dialling I think a part of the lode is good ore. The north. We shall put men out in north next week. The stope in back of this level is not quite so good as last reported. The lode in the 12, driving west, is 1½ ft. wide—very promising lode.

NORTH GREEN HURTH.—James Polgase, May 24: The men are now driving on the vein recently cut in the deep level, and by another week I shall be able to state more particulars. The south drive is without change. Our men are exploring the new ground.

NORTH HERODSFOT.—T. Trelease, May 31: There is not much change in the 117 end since the last report. We are still driving on the fookan, which has taken a more westerly bearing, and the ground is still an unsettled condition, and I think it will be wise to continue on the fookan until we get more settled ground before we cross-out to the lode. I have suspended the south stope for the time, and put the men to stope the ground in the south part of the winze in the 80. We have taken down the lode in the north stope in the 117; it will now produce 10 cwt. of ore per fathom. We have crossed a channel of ground in the 80 end this week, composed of capel and quartz, intermixed with mudiic, and letting out a quantity of water, and put the men on Tuesday to drive north on its course, but I see to-day that there is still water coming out from the eastern breast, and we have resumed driving in that direction to-day.

NORTH TREKERRY.—Pryor and Bay, May 31: Since our last report we have cut No. 2 tin lode, and so far as we have yet ascertained it is 6 ft. wide, and north for tin fully 25 ft. per fathom. The north part is a little disordered by a large fookan course, which is letting out an immense quantity of water. This lode is about 9 fms. 3 ft. north of the last lode intersected, both of which are comparatively in virgin ground. There is another copper lode about 25 fms. still further north of the last lode cut, which can be seen in the shallow adit level, and where intersected in the deep adit cross-out we have every reason to believe will prove equally productive as any other lode in this district. The two last tin lodes referred to are, as regards productiveness, all that could be expected, and when opened on will produce large quantities of rich tinstone. After we have driven a little beyond the fookan course we should advise opening east and west on these two lodes, and we repeat, on the course of which we have almost virgin ground, and in such a locality as is indisputable.

OUEL TOR.—H. Bulford, J. Rodda, May 31: The new eastern shaft is 9 ft. below the 80, and good progress is being made. The 80 end east is improving. Nothing further to report.

OLD SHEPHERDS.—J. and J. Nancarrow, May 29: Since our report of the 15th inst. the men in Haver's engine shaft, with four additional hands have been engaged cutting ground for the new plunger-lift, which will be completed high enough by to-morrow evening, after which we shall make another effort to get our drop-lift a little deeper while the castings for said plunger are being got ready. In clearing and securing the old shaft we think we are very near the 44 below adit. The men in Teague's shaft are using every effort in cutting down and securing the same below the 54. We would here remark the shaft being full of stuff, and the skip working during the day, we can only devote the night in prosecuting the work. In the 54, east end of Teague's shaft, and the hard part of the lode left standing, which we are now cross-cutting to ascertain its value. Shall be able to speak more definitely on it in our next report. The lode in the stope in the back of this level is fully 12 ft. wide, of a beautiful character, and producing lead and blende throughout, and we are daily expecting an important improvement. At the 44, east of Teague's, we are clearing with all possible speed, so as to effect a communication with the old sump for ventilation and a travelling road, which is of great importance, as stated in our previous reports. At the 35, east of Teague's shaft, on the counter lode, the stope continues to look well, and will no doubt be a good one for the shareholders. Erection of the new crusher is in a forward state, and all the heaviest parts are fixed in their respective places, and will be ready to work at the time named in our last. The dressing and all other surface work is proceeding in the usual way.

PARTS COPPER CORPORATION.—T. Mitchell, May 31: The lode in the 65, east of cross-course, is looking much the same as last week. We find the ore side of the lode more towards the hanging side, and in stripping down the lode on this side we have broken out some good saving work. We have not done much at surface trial this week, as we had to take the hands to assist in preparing the precipitate.

PENHALLS.—S. Bennetts, J. Goynne, May 30: In the 80 west end the lode is 1 ft. wide, and worth 5 ft. per fathom. In the 70 east end it is worth 8 ft. per fathom. The 60 east end is worth 8 ft. per fathom. The south section of the lode in the 50 east end is worth 8 ft. per fathom, and on the Balduh lode the 42 west end is producing some low quality tinstuff. In the other points of operation there is no change to notice.

PEN-YA-ORSHED.—R. Prince, May 31: The lode in our west level, the 165, has been rather pinched, but now shows signs of coming out, and I am pleased to say traces of lead have been discovered, and I think there can be scarcely any doubt that we are near to a large deposit of ore. During the next week or ten days I hope to write you more satisfactorily and definitely.

POLOREBO.—W. H. Martin, May 30: Engine-shaft: In the 30 east a small slide has come in from the south or footwall; for the present the lode is not so well defined. South Cross-cut: At the 17, driving on the cross-course, the ground is running in more combs and joints than we have seen before. High-burrow Shaft: We continue to make fair progress in sinking; the lode is standing on the footwall, and has not been taken down for the month; this shaft is sinking in the centre of the mine, and from the improved prospects sinking below the 17 there is every indication that at the 30 a valuable section of ore ground will be opened up. On Monday we sold 37 tons 14 cwt. tinstuff for 74½ lls. 6d. The sinking of Highburrow shaft to the 30 is making good progress, and opening up a good section of tin ground in the middle of the 17. Above this, at the 17, a tribute pit is being worked by six men at 6s. 8d. in the 17, the tin from which is sold in the stone, which gave about 50% profit to the adventurers for the last month. Highburrow shaft is expected to be completed to the 30 by the end of July, when there will be stopeing ground opened out to give employment to many such pairs of tributers, and with stamping power upon the mine shareholders will not have long to wait for dividends.

POLROSE.—W. Bennetts, May 30: Since my last report the men have been making good speed in sinking the engine-shaft below the 112, not having been hindered in their work by the water. The lode in the eastern end of the shaft is about 2½ ft. wide, a little smaller in the western end; it is composed of peach, spar, mudiic, &c., carrying the lode throughout, and some stones of lead have shown good veins. The men have already hoisted some of the lode to surface, and we shall haul again in a day or two, when I will take a sample of the whole and let you know the value of the lode.

PORT NIGEL.—John Mitchell, May 31: We have been getting on well with the driving in the 95, but are not yet driving on the course of the lode, as to do so would not be suitable for our tramroads. In the 80 west the branch of blende is still continuing, although not quite so large as it was, being now about 3 ft. wide in the bottom of the level, but not so much in the back. The lode is getting larger again, and has been driven on about 2 fms. since the men started this month. In the 80 east the lode is still very large; it contains occasional stones of lead. It is very soft, with streams of water coming from the back, which makes the ground very heavy. We are obliged to timber it both in the back and sides. This level has been driven about 1 ft. 4 in. this month. In the 85 east the lode is not so large as it was, but it still contains small stones of lead. The two men have driven it about 6 ft. since they started. The engine is working satisfactorily, but only at a slightly reduced speed, the flow of water still being heavy. We intend to sample the parcel of lead ore that is dressed on Saturday, for sale next week.

PRINCE OF WALES.—S. Roberts, May 30: No lode taken down in the 102 end since last week. Lode in the stope in the back of this level is 4½ ft. wide, worth 7 ft. per fathom for tin. The lode in the 102 cross-cut, west of shaft, is 4½ ft. wide east of cross-cut, and 3 ft. wide west, and worth 15 ft. per fathom for tin; also producing very rich stones of copper ore, a fine lode in appearance. In the cross-cut north at the 90 west the ground is still hard. Stope in back of 90 west lode 3 ft. wide, worth 7 ft. 10s. per fm. for tin and copper ore. No. 1 stope in back of the 90 east lode is 4 ft. wide, worth 10 ft. per fathom for tin, with a little copper ore. No. 2 stope in back of this level lode 3½ ft. wide, worth 7 ft. 10s. per fathom. No change to notice in the tribute pitches since last reported. Goodluck: Stope in the back of the 28 the lode is 4 ft. wide, worth 7 ft. per fathom.

ROMAN GRAVELS.—Arthur Waters and Sons, May 31: The 125 north is in a lode 3 ft. wide, worth 1 ton per fm. The 125 south is in a lode 3 ft. wide, yielding some good ore. The 110 north is yielding stones of ore of a promising character. The 110 south is up to Corfield's run of ore, lode-to-day worth 2½ tons per fm., and improving as we go forward. The 95 south is worth 2½ tons per fm. The 50 south is in a lode 3 ft. wide, worth 3 tons per fm. The winze below this level is worth 3½ tons per fm. The winze on east portion of lode in the 65 is worth 3 tons per fm. The stopes in the various levels north and south of new engine-shaft are worth together about 50 tons of lead ore per fm. We have to-day sampled 300 tons lead ore for sale next week.

RUSSELL UNITED.—John Bray, May 31: The leading part of the lode in Mathever's shaft, below the 97, is producing a little more copper and mudiic than when last reported; the lode is fully 4 ft. wide, of a very promising character. Nothing new to report in any other part of the mine.

SINCLAIR.—W. Edwards: Rapid progress has been made with the sinking of the engine-shaft; in fact, we have gone down much quicker than I expected. Within a fortnight or three weeks I shall be deep enough both for the east and west lode development, and also for cross-cutting southward. I am very pleased to report that lately we find in the sinking a total change in the dip of the lode, clearly demonstrating in my opinion that we shall find the lode to the south much nearer the surface than we have hitherto expected. The ground is more highly mineralized than even at the 50 above, and I have not the least hesitation in stating that we shall find a great body of ore. The directors will, no doubt, have expressed their satisfaction at seeing the pile of ore raised from No. 2 shaft. By the date of the next board meeting I think I shall be able to lay before you a statement of results as to raisings that will afford satisfaction to all interested. Sampson Shaft: This has been commenced and is intended to come down upon the east and west and north and south lodes. The trial will be a short one, and

I am sure will prove most advantageous to the company. Now that the fine weather is on I hope to be able to get into the other shafts and set the men to raise ore upon tribute.

SORTRIDGE COPPER.—Wm. Skeewis, May 31: The 40 cross-out towards the Great North tin lode has been cleared with six men and three labourers. We shall continue to press this forward with all possible speed; also to clear the 40 east on No. 1 tin lode in order to prove its value and report the same.

SOUTH CONDOURROW.—W. Rich, W. Williams, H. King, May 30: The 93 end, east of King's shaft, is hard and poor. The 80 end east is worth 9 ft. per fm. The stope in back of this level is worth 11 ft. per fm. The 70 end east yields low quality tinstone. The stope in back of this level is worth 12 ft. per fm. The 70 end, west of cross-cut, carries stones of tin. The 60 end east has a kindly appearance, worth 8 ft. per fm. The stope in back of this level is worth 10 ft. per fm. The 50 east is poor. We are cross-cutting south in this end to prove if there is any more lode standing in that direction. The rise in back of the 40, west of cross-course, is worth 8 ft. per fm. The 30 end west is unproductive. Two stopes in back of this level are worth together 30 ft. per fm. The stope in back of the 12 is worth 12 ft. per fm. We are urging on the 20 cross-cut, north of engine-shaft, to communicate with the stope on the tin lode. The operations at Marshall's shaft are progressing satisfactorily.

SOUTH DEVON UNITED.—Wm. Hooper, May 31: The lode in the 110, east of Brook engine-shaft, is fully 6 ft. wide, of a promising description, producing capel, spar, mudiic, and copper ore, to the value of 14 ft. per fm. The stope in the back of this level are without any particular change since last reported. No. 1 stope, worth 7 ft. per fm.; No. 2 ditto, 8 ft. per fm.; Nos. 3 and 4 ditto, 7 ft. The stope in the back of the 110, west of Brook shaft, the lode is 6 ft. wide, worth 9 ft. per fm. In Martin's shaft the men are making as fair progress as the nature of the work will admit. The lode in the adit level, west of old sump shaft, is 5 ft. wide, producing gossan, spar, arsenical mudiic, with stones of copper ore. For better progress we are driving by the side of the lode at the 70, west of old sump shaft, where strings of copper ore are to be seen in the kilas. After driving about a fortnight we shall take down the lode, when we shall be enabled to report as to its character. Our prospects here are very encouraging, from the fact that the adit level has been driven through a lode of a most promising description for a very long distance, and I do look upon this point as one that will lead to large quantities of copper ore. This point has our best attention, and shall be pushed on as fast as possible. The machinery throughout the mine is working very satisfactorily, and we are busily engaged for our next sampling. We hope shortly to ship 100 tons of slimes ore, bought by Messrs. Vivian and Sons.

SOUTH DARREN.—Henry James, May 31: There is no particular change at any point of operation to report this week. The weather still keeps very dry, and water very short. We sample on Saturday 45 tons of silver-lead ore for sale on June 8.

SOUTH FRANCES.—C. Crase, May 30: Pascoe's shaft is being sunk below the 225, by nine men, the lode is still worth 40 ft. per fathom for 12 ft. 30 tons cwt. and has some fine lead in it. The 235 lode, the 235 lode, being driven east of Pascoe's, by three men, at 132. 10s. per fathom; the part of lode carried is worth 10 ft. per fathom, and looks kindly for an improvement soon. A rise in the back of this level, by three men, at 11 ft. per fm., the lode in which is worth 20 ft. per fm., and a stope, by six men, at 6s. per ton; 1 stuf; lode worth 20 ft. per fm. The 226 driving west, by six men, at 9s. 10s. per fm.; lode worth 20 ft. per fathom; and a stope in the back of this level just behind the end, by nine men, at 5s. per ton; the lode is worth for 8 ft. wide 22 ft. per fm. The 215, east of Pascoe's, driving by three men, at 13 ft. 10s. per fathom; the lode is worth 12 ft. per fm., and we look for an improvement at an early date. A stope in the back just behind this end is worth 20 ft. per fathom, working by six men, at 6s. per ton of stuff. We have commenced to sink a winze in the bottom of the 215 west about 16 fms. before the 225 end; the lode here is worth 2 ft. per fathom for length 9 ft., sinking by six men, at 15 ft. per fathom. No. 1 stope in the back of the 215 west is worth for 9 ft. wide 18 ft. per fathom, working by six men, at 4s. 6d. per ton. No. 2 stope, by six men, at 4s. 6d. per ton is worth 14 ft. per fm., and No. 3 stope, by three men, at 4s. 3d. per ton is worth 12 ft. per fm. In the 205 east towards the 135 lode, the shaft is being made, 6 fms. having been driven in the last month. We are driving on the main part of the lode here, as we have to drive on a given bearing to reach the point where the shaft will come down, and our object for the present is speed. The 165 is being driven west by boring machine; the lode in the end is worth 18 ft. per fm. A stope in the back just behind this end is worth 24 ft. per fathom for 7 ft. wide. A stope in the back of the 185, east of cross-cut, by eight men, at 4s. 9d. per ton; lode is worth 18 ft. per fathom for 9 ft. wide. The 165, west of cross-course, driving by two men, at 11 ft. 10s. per fm.; lode worth 3 ft. per fathom. Two of the stope above the 135 lode have lately been set on tribute in order to get the best selection of the stuff possible. Marriott's shaft below the 135 is being pushed on with all possible speed, and we have just set another contract to the men of 5 fms. to sink at 29 ft. per fathom. We have not made as good progress in sinking Daubuz's shaft of late as we should, owing to one or two of the men being unwell, and the indifference of others. However, we have made some changes in the pare, and hope to sink faster in future. We are pleased to say that we have no trouble to keep in fork at present, and the bottom of the mine is opening out quite as well as we expected. The sale of tin for last month was 30 tons 5 cwt. 2 qrs. 27 lbs. for 1599. 10s. 5d., including carriage, and we have every reason to believe that we shall do still better in the present month.

SOUTH TOLCARE.—Thomas Angove, Samuel Arthur, May 30: The lode in the engine-shaft is 4 ft. wide, worth 10 ft. per fathom. The 70 end west is worth 10 ft. per fathom. The 70 end east is worth 7 ft. per fathom. The 60 end west is worth 8 ft. per fathom. The rise in the back of the 60 east is worth 8 ft. per fathom. The 50 end east is worth 8 ft. per fathom. The 40 end east is worth 8 ft. per fathom. Taylor's stope is worth 33 ft. per fathom. We sold a parcel of tin, about 10 tons, last week, at 27 lls. 6d. per ton.

TANKERVILLE GREAT CONSOLS.—Arthur Waters and Sons, May 31: Bog Mine: The engine-shaft is now 11 fms. below the 175, and the water is going down slowly in the ore pits 12, 13, 14, and 15, the lode being worked together at the four points 12½ tons per fathom. Other places as for some time past.—Pennerly Mine: There is no material change here for the last week or two. The winding-engine, driven by compressed air, does its work admirably.—Potter's Pit Mine: There is a very big cavity in the very bottom of the mine here, the ground and lode being very much broken up, but there is a good lead ore in sight.—Tankerville Mine: The various points here are looking a little more promising than for some time past. We have sold to-day in Pennerly 100 tons of lead ore for 832. 10s.; at Bog, 50 tons of lead ore, for 418. 5s.; and 60 tons of blende for 186. 10s.; at Tankerville, 30 tons of lead ore for 240. 1s., and 80 tons of blende for 213. 1s., making sales 1895. 5s.

TREBARTHA.—W. Skeewis, May 31: The lode at the engine-shaft varies in size from 2 to 3 ft. wide, composed of strong capel, arsenical mudiic, and tin; a very strong and fine looking lode, and such as is likely in depth to be very productive. The ground is favourable for sinking in, therefore good progress is being made. The stamps are being erected, and I hope soon to have them at work.

TREGONTREES AND OLD POLGOOTH CONSOLS.—L. Pascoe, May 29: As I intimated in my last, our various stopes are of a very encouraging character, and in order to work those stopes more advantageously I have deemed it expedient to let on concern to let them on tribute. The following is a list of stopes now let on tribute. On the main lode at the 17 at 11s. 1d.; standard 50 ft. per ton for tin. On the lode in the back of stamps at 10s. 1d.; standard 50 ft. per ton. Nos. 2 and 3 stopes on flat at 8s. 1d. in 1d., and a market price of 5 lls. No. 1 stope on the flat lode not to be let this month.—Deep Adit: Still opening ancient workings.—New Shaft: Shall complete the 10 ft. sink in course of a few days. The machinery throughout is working well.

TREAVEAN.—Captains Prisk and Edwards, May 26: Engine-shaft: We have fixed the 16-in. plunger-lift at the 75, and are pleased to say it is working well, and the drop-lift is sent to the 100, at which point we hope to be in fork by mid-summer.—William's Shaft: We have cleared about 18 fms. through the 27 cross-out north towards Gooch's and Caddy's lode; the importance of clearing this end is that it will enable us to see Caddy's lode at the 27 below the deep adit. At the deep adit we have cleared the lode worked by the former workers on Gooch's lode east and west, and intend this week to put a pair of men to open on the eastern end.—Gooch's Lode: There is no change in the value of this lode since our last report. We are now going to put a pair of men to stope over the back of the eastern end, and will let you know the result in our next report. We have erected a horse-whim at Treweek's shaft to draw from this and the old Treavean lode.—Caddy's Lode: In our last report we gave you the value of the several pitches on this lode, and now we have seen any change. The lode in the 12 below the shallow adit is now being worked on tribute by four men, at 12s. 6d. in 17. Seeing we are likely to have a large quantity of fair quality tinstuff to come away from here, we intend putting up a rise to hole this ground to the winze; we have already done 9 fms. At Cunnack's shaft on this lode about 10 fms. below surface we have had during the past month some very good tinstuff from an end driving east by two men, at 2s. 10s. per fathom, and 12s. in 17 tribute. The masons are making good progress with the house for the 24-in. engine for winding at Williams's. The 30-in. engine and all other machinery continue to work well.

TREVAUNANT UNITED.—Wm. Vivian, May 31: We continue to push on the cross-cut south of middle shaft, in the 55, to intersect the Friendly lode. Our tribute ground continues to produce its usual quantity of tin. There are several old miners asking to take tribute pitches in the south part of the mine. We are about to put up a horse-whim on the south shaft, when the ground asked for will be let.

WEST CREBOR.—John Andrews, May 30: The lode in the engine-shaft sinking below the 62 continues to look very encouraging, and I still yields good saving work for copper ore. In the 62 west no lode has been taken down for the month, but we shall begin to take it down in the early part of next week. There is no change in the 62 east.

WEST DEVON GREAT CONSOLS.—G. Rowe, May 29: The engine-shaft is sunk the required depth for a 50 ft. level, where the lode is 18 in. wide, composed of fookan, spar, mudiic, and copper ore; the men are now engaged in squaring down the ground to fix the solar, and will commence the drive and put in the necessary timber to bring down the winze kibble without delay. The lode in the 30 west is improved to 2 ft. wide, composed of spar, mudiic, and copper ore, with a very kindly appearance, and with an increase of water.

WEST GONAMENA.—N. Richards, May 30: The main lode in the adit level, driving west of shaft, fully maintains its size and promising appearance, producing peach, mudiic, and some rich copper ore.

WEST GODOLPHIN.—T. Hodge, F. Hodge, May 29: The lode in the 80 east on Pink lode is split by a horse of granite, but it still maintains its value; worth 14 ft. per fathom. There is no other change, all works going on regularly.

WEST KILTY.—Wm. Vivian, May 31: There is no change to notice in the mine since last week. Everything is going on satisfactorily.

WEST LISHERNE.—W. Northey, May 30: I have completed the reservoir, and the men are now making inlets and outlets for the water, and erecting the new ladders to carry the water to the pumping-wheel. The shower of rain on Monday night made little or no water for the wheel, and the weather still keeps very dry.

WEST PATELEY BRIDGE.—David Williams, May 31: The lode in the drive west of stope, in the back of the 56, is upwards of 2 ft. wide, composed of gossan and spar, with branches and patches of good quality lead ore. No other change to notice this week.

WEST PHENIX.—R. Gluyas, May 31: The shaftmen have finished cutting plat at the 55, and are now engaged in driving north to intersect the lode. There is no change to report in the 32 level, driving towards Vatcher's shaft, since the last meeting; a very nice looking lode.

WEST POLBREEN.—W. Vivian, May 31: We have intersected Tregay's lode at the 40, the lode is about 2 ft. wide, producing rich stones of tin, worth about 10 ft. per fathom. This lode has been worked on very extensively in the adjoining mine, where large and profitable returns have been made.

WEST WHEEL PEEVOR.—W. T. White, May 30: Setting Report: On Monday week last we put 12 men in the engine-shaft to sink below the 60; we have about 9 fms. more to communicate to the 80. We have offered them 10s. per man as prize money to hole to the 80 in 4½ months, which they accepted, and as a commencement they sunk 3 ft. last week. With this speed they will accomplish it. The 80, to drive west of boundary on main lode, at 6 ft. per fathom; lode worth 15 ft. per fathom. The 80, to drive west of boundary on middle lode, at 6 ft. 6s. per fathom; lode worth 15 ft. per fathom. The 70, to drive west of boundary on main lode, at 5 ft. 10s. per fathom; lode worth 15 ft. per fathom. The 60, to drive east of main winze, at 5 ft. 10s. per fathom; lode worth 10 ft. per fm. We have not yet communicated the rise in the back of the 43, west of cross-course, with the winze in the bottom of the 36, but are expecting daily to do so. When done we shall resume the driving of the 43 end west, where the lode is 3 ft. wide, producing good tinny ground. The 36 cross-cut, to drive south and west of cross-course, at 6 ft. per fathom. We must be very near the first of Wheel Diamond lodes in this cross-cut. We also set five stopes on tawut at prices varying from 2. 10s. to 2. 17s. per fathom; lode worth in each about 10 ft. per fathom. We consider the prospects of the mine are improving, and when the Empire shaft is communicated to the 80, judging from the ground being laid open in the bottom levels profitable returns will be made.

WEST WHEEL TOLGUS.—John Gilbert, May 31: Richards' Shaft: In the 175 west of shaft, the lode is 4 ft. wide, composed of spar and mudiic, and occasional stones of copper ore, but rather disordered by patches of kilas. In the winze in the bottom of this level the lode is 18 ft. wide, and yielding 1½ ton of ore per fathom, but the ground is hard and spare for sinking. No. 1 stope in the bottom of this level is yielding 3 tons of ore per fathom, and No. 2 stope is yielding 4½ tons of ore per fathom. The lode in the 85, west of shaft, is 3½ ft. wide, yielding a little copper ore, but not sufficient to value, and still letting out a very large quantity of water. There is no change since the last report in any other part of the mine.

WHEEL BASSET.—W. C. Trevena, May 29: Setting Report: Lyle's engine-shaft to sink below the 160, by 12 men and four boys, at 45 ft. per fathom. After sinking 2 ft. further we shall commence cutting flats for the 170. The 160 to drive north through the cross-course, by six men, at 8 ft. per fathom. The 150 to drive west, by six men, at 8 ft. per fathom, which is worth for tin 15 ft. per fathom for the part we are carrying. After driving a few fathoms further west we shall cut through the lode to ascertain its full size and value. The 150 to drive north, by six men, at 10 ft. per fathom. We expect it will take this month to reach the lode east of the cross-course and leave. A winze to sink below the 150, on North Basset lode, by two men, at 8 ft. per fathom, which is worth for tin 10 ft. per fathom. The 137 to drive west of cross-cut, by six men, at 6 ft. 10s. per fathom, and worth for tin 15 ft. per fathom. This end has a very promising appearance for further improvement. A winze to sink below the 137, by six men, at 8 ft. 10s. per fathom, and worth for tin 12 ft. per fathom. The 134 to drive west of cross-cut, by two men, at 8 ft. 10s. per fathom, and worth for tin 5 ft. per fathom. This end will shortly enter the run of tin driven through in the level above and lay open a section of stopeing ground. The 112, east of cross-cut, is letting out a large quantity of water, and gradually draining the old South Carn Brea Mine, driving by two men at 10 ft. 10s. per fathom. The 112, west of cross-cut, is worth for tin 7 ft. per fathom, and driving by two men, at 8 ft. 5s. per fathom. We have seven stopes working by 36 men, at 3s. 16s. per fathom, and worth for tin 10 ft. per fathom; and 12 pitches, working by 34 men, on tributes varying from 15s. to 18s. per ton.

WHEEL CREBOR.—H. Phillips, P. D. Holman, May 29: Our progress in sinking the new shaft below the 132 is not so good as it has hitherto been, the ground being thickly impregnated with branches of spar; the lode has an improved appearance, containing good stones of copper and arsenical ores. The lode in the 132, east of No. 2 winze, will yield 10 tons of good quality copper ore per fathom. We have four men stripping down the lode at this point west, which will yield 8 tons of good ore per fathom. This will open out a new stope in the back. We have suspended the winze sinking below the 132, west of new shaft, owing to the water being more than we can compete with; there is a good lode going down in the bottom at this point. The stope in the bottom of the 120, east of No. 2 winze, will yield 16 tons of good ore per fathom. The stope in the back of the 103 will yield 3 tons of ore and 2 tons of mudiic per fathom. The stope in the back of the 48 will yield 2 tons of ore and 2 tons of mudiic per fathom.

WHEEL HONY AND TRELAUNY.—William Derry, John Pearce, Hubert Lanyon, May 31: The 120 is expected to be unwatery next week, and forking below is still continued. The winze below the 138 is being pushed down as fast as possible. Nothing new to report with regard to latter level. Lewis's shaft in the Hony estate is down rather more than 10 fms. from surface, in a channel of ground which nothing but a surplus for production of ore, it being a splendid kilas with a soft elvan, full of fine mudiic, and in the southern end a fookany slide overlying this elvan. The old miners who have worked on this lode extensively in the other mines are sanguine that a rich and profitable mine will here be opened up shallow, independent of our deeper operations at the Trelawny end.

WHEEL JANE.—R. Southey, May 31: The end driving west of Gilbert's shaft, on the Great Flat lode, is worth 10 ft. per fm. driving by four men, at 8 ft. per fm. In the 16, east of cross-cut, on the Ready Money lode, the lode is worth 12 ft. per fathom, end driving by four men, at 3s. 5s. per fathom. West of cross-cut, in the same level, on the same lode, the end is worth 6 ft. per fathom; a winze sinking in bottom of this level is worth 10 ft. per fathom, sinking by six men, at 4s. 10s. per fathom. In the 30 we have intersected a branch 18 in. wide, and have commenced to drive on it, worth 10 ft. per fathom. In the 70 level we have six men stopeing at 3s. per 100 sacks; lode producing fair average tinstone. Having at West Trelawny a large section of ground unexplored, I have sent a man east of shaft to stope the back at 3s. per 100 sacks. Surface operations progressing very satisfactorily. I hope very shortly to have the jiggling machinery working.

WHEEL LUSKY.—Wm. Skeewis [May 31: The lode in the adit driving west is from 6 to 8 ft. wide. The main or leading part of it is on the south side, and is from 3 to 4 ft. wide, containing quartz, sulphur, mudiic, and grey and yellow copper ore. I am glad to say that I never saw the lode looking so well as it is now, and am looking forward to an early and important discovery of copper.

WHEEL UNY.—W. H. Henty, W. Henty, W. Henty, May 31: Good progress is being made with the men in sinking Hind's engine-shaft below the 135 fm. level. The lode still continues large, and worth 15 ft. per fathom for tin. The lode in the 193 end west is composed of quartz, peach, and mudiic, and letting out water very freely; we are driving the same by six men, at 8 ft. per fathom. The lode in this end for the last 6 fms. driven has been worth 6 ft. per fathom; the present end is of the same value. We are pushing on the driving of the 132 west with all speed, in order to get into the run of tin ground driven through in the level above. The lode in the present end is of a very promising character, and looks likely soon to further improve. We hope to communicate the 132 end east with Gooding's shaft in a week from now. There is no change in any other points of operation since last week.

YORKSHIRE LEAD.—J. Retallick, May 26: Since my report of Sept. 30 we have uninterruptedly continued the operations which we were then proceeding with, and we have made considerable and advantageous progress. In the deep adit level, known as the Water level, we have had some difficult work to get through as we proceeded in the direction of the Cat shaft, wing to an increased body of water and the peculiar construction of the level, but having discovered some bore-holes in the bottom of No. 5 shaft we have, I am glad to say, been able to let the water off at this point, and have cleared the level beyond in a westerly direction about 50 fathoms, and shall now make rapid progress in completing it to Cat shaft, which will be the centre of our future operations. We have made progress in enlarging this shaft, making it 8 ft. long by 5 ft. wide, a capacity in keeping with the productive capabilities of the several lodes which are here so close together, and with the exercise of the power of a winding and pumping engine to be erected of sufficient power for the purpose of energetically discharging the property at this point to a very considerable depth, and when we get this engine into operation we shall not be many months before we are able to send lead ore into the market. The engine ought to be obtained and put on the mine with as little delay as possible in order that we may take advantage of the summer months for carrying on these out-door operations, and if this were done I feel confident that by the autumn we should be able to show some very satisfactory results. Having been in charge of these mines for nearly two years past, during which time our operations have been continuous, I may say, having also had the means as a practical miner of making myself acquainted with their character and the great resources of mineral which they undoubtedly contain, I am more than ever confident that if the work which I have pointed out be done quickly, and it can be carried out at a very moderate outlay, they will give to the proprietors large and lasting profits. I beg to say that so long as I am employed here I shall devote my best energies in carrying on the work.

GAS SHARES.—The principal business in these shares, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, has been:—Buenos Ayres New (Limited), 8½

blue on the floors, were they producing largely at the time of the accident? What did these claims produce in the three months and in the six months preceding the slip? and, since how long has the blue of the Kimberley Mine averaged 40s. per load in value? The largest producers are the Central and the Compagnie Française, and these between them have 140,000 loads ready for treatment and will be as free as ever in three and in five months respectively. The Gem is not under reef, and therefore its output can scarcely be affected. Until figures are given it may be assumed that the North Block Company alone will send fewer diamonds into the market, and they have 6000 loads to wash in the six months, by which time their ground will also be clear. Considering all things it would appear to require much more evidence to prove that, assuming supply and demand to be the only disturbing influence, there is any reasonable probability of any permanent advance in the price of diamonds.

William Elmore (Limited) is, it appears, filling its list of applications for shares more rapidly than the most sanguine of its promoters anticipated, the practical acquaintance of the directors with the business to be carried on no doubt producing a favourable impression upon capitalists. One of the directors is, it seems, much interested, from commercial considerations, in the Elmore copper extraction process, and has given a large order for apparatus to work the process estimating that it will save him on 15,000 tons of ore 10,000l. per annum at his works alone—the use of iron being entirely dispensed with. This fact is of great importance, since the estimated revenue to be derived by William Elmore (Limited) from this patent will be, in addition to the profit derivable from the sale of machinery, and is, put down at 60,000l. per annum. The amount of burnt ore treated at different works in the United Kingdom by the wet process amounts to over 400,000 tons per annum. The Tharsis Company alone treats 200,000 tons, and it is remarked that if on 15,000 tons the saving is 10,000l. per annum, the saving in such works as the Tharsis would alone represent a handsome dividend. Anticipating a large demand from this field of operation, William Elmore (Limited) are making great preparations for the manufacture of machinery for this process. From the profitable nature of the company's undertaking, both as regards royalties and the manufacture of machinery, a large and permanent success is looked forward to.

Devon Great Consols, 4½ to 4¾; the sampling of copper ore during the past week was 866 tons for the month's produce. The proceedings of the half-yearly meeting of shareholders will be found in another column, and it is remarked that considering the late severe winter and the additional expenditure thereby necessitated, as well as the low price of copper which has prevailed, it must be satisfactory to the shareholders to learn that under these circumstances any profit could be made. The Chairman and his colleagues may, therefore, be congratulated upon the fact that the profit during the last six months had been over 3000l. As Mr. Peter Watson pointed out, had the price of copper ore been what it was five or six years ago a dividend at the rate of 1l. per share per annum could have been paid, and that this is an important factor in the operations of the mine which cannot be overlooked, seeing that it is the low price of copper which militates so much against the company.

Devon Great United, 4 to 4½; the half-yearly meeting of shareholders is reported in another column. It will be seen from the agents' reports that considerable improvement has taken place in the bottom of the mine, and the situation of this portion of the company's property, being in close proximity to where the great riches were first discovered in Devon Great Consols, it is hoped that something of importance will be shortly met with in Devon Great United.

Drakewalls, 4 to 4½; the agents report that satisfactory progress is being made in unwatering the mine below the adit level.

Kit Hill, 4 to 4½; in another column will be found an account of the proceedings of the half-yearly meeting of shareholders, from which it would appear that "the undertaking which the directors have set themselves to accomplish is no ordinary enterprise. Great expectations are anticipated from the driving of the great tunnel level and sinking the shaft from the top of the hill to communicate with the tunnel, the latter being already over 80 fathoms deep. A vigorous prosecution of this promising concern will, there is little doubt, meet with profitable results."

South Wheal Frances, 8½ to 9, and in demand. In another column will be found a highly satisfactory report from the agents at the mine, from which it will be seen that the lode in Pascoe's shaft is worth 40l. per fathom for 12 ft. long, and Marriott's shaft below the 185 is being well pushed forward. The bottom of the mine is opening out satisfactorily, and it is intended that every attention shall be paid to the working and vigorous prosecution of this mine. The sale of 30 tons of tin last month realised about 1600l.

Cape Copper, 52½ to 55; the directors, at their meeting on Wednesday, declared a dividend of 20s. per share, free of income tax, payable on June 23, to the shareholders on the books of the company on June 11, and a bonus of 20s. per share, free of income tax, similarly payable.

Akakoo, 3 to 3½; Capt. Amundsen, who has been acting as manager at the mine, arrived home on May 23, and reports all well at the mine at time of his departure, and work proceeding satisfactorily. The company have letters also from the coast to April 28, which arrived at the same date. It was expected that the reef would be reached in another 100 ft. or less, and the air shaft to meet the adit was being rapidly sunk. The unloading of the Laura was completed, and the machinery and stores, &c., safely landed.

California Gold, 11-16th to 13-16th; the mill run this week was 313 tons; yield, 680l.; smelting ore sales, 170l.; total, 850l. The shares are reported firmer.

Colorado United, 3½ to 3¾; the meeting was held on Monday, the proceedings at which are fully reported in another column, again decided adversely to the direction; and upon the board being called upon to resign, an effort was made to postpone the step until August. This proving a failure, the Chairman—Mr. Fraser Rae—left the chair, the business of the meeting being still unfinished. The meeting, thereupon, elected Mr. T. W. Burton, who holds 2000 shares, to the chair, and a resolution was unanimously passed removing the directors from office. The next resolution in the notice of the meeting was then dealt with—that of electing other directors to fill the seats vacated. Upon this question the meeting was almost unanimous, there being but one dissentient in the room to the resolution electing Messrs. T. Wardell Burton, T. Steven Lindsay, J. Stratton Thompson, C. H. Trinks, and Arch. J. Smyth to the five seats on the board. The proceedings having been terminated, the new directors adjourned to the offices, and held their first board meeting, attended by Mr. H. Brandon, of Essex-street, and Mr. W. P. Baker, of Messrs. Lawrence, Plews, and Baker. It is to be regretted that the late directors did not more willingly accept the decision of the majority and resign, as it is at all times unpleasant for a meeting to have to demonstrate that directors are the paid servants and not the masters of the shareholders.

Kohinoor and Donaldson, 1 to 1-16th; advices from the mines dated May 14 stated that the building of the new mill would be completed by the end of May.

Richmond, 6½ to 7½; the week's run was \$15,000 from 295 tons of ore with one furnace. During the week the refinery produced doré bars to the value of \$20,000. The superintendent's weekly report upon the present condition and advance of the prospecting and dead work for the week ended May 7 states that the 1050 north-west drift from station has been extended 15 ft. Total 670 ft. In limestone. The 1050 north-east drift from north-west drift has been extended 15 ft. Total 223 ft. In limestone.

Ruby and Dunderberg, 1½ to 1¾; the weekly report advises the completion of the new shaft, and of the machinery at the Home Ticket Mine, and work had again been commenced on the ore body. The result of this is shown in the three last telegrams, which have reported an increasing output. The message received this week advises an output of 143 tons. The ore sold for smelting during the week again shows an improvement in quality, the assay in gold and silver at Eureka standards being nearly \$50 a ton. It is understood that with the present output and quality of ore a fair profit is being made.

Kimberley North Block Diamond, 3 to 4; the directors state that since their circular of May 3 they have received advices from their manager in which he reports subsidence of the reef, and estimates the quantity on this company's claims at 15,000 loads. He also states that the tariff fixed by the Mining Board for hauling reef is 3s. per load, which he estimates will cover the cost of hauling. During the past month diamonds to the estimated value of 2200l. have been obtained from the blue which was on the floors at the time of the fall of reef; there may be a small quantity of this ground still remaining on the floors. The total figures since July 1

1882, are:—Blue ground hauled, 29,805 loads; diamonds found, over 53,500l. worth.

In Lead Mine shares there has been very little business, the depressed condition of the lead market and declining prices not being encouraging to investors or speculators. Tankerville, 4 to 4½; there is no particular alteration in the mine during the past week. A further reduction has been made in the price of ore sold this week.

Roman Gravel, 8 to 8½, ex div. of 5s. per share paid this week; the 60, 80, 95, and 110 south are opening out well, and the sampling of lead ore for the month is 300 tons.

West Lisburne, 3 to 4; the reserve pond for the storage of water will hold 367,200 gallons of water, and will greatly assist the dressing machinery, which will be completed at an early date.

Leadhills, 2½ to 3; a dividend of 4s. per share (4000l.) has been declared. Good progress is being made at the mines, especially in Gripp's adit level, which has improved 2½ tons per fathom.

At the General Life and Fire Assurance Company's meeting, the Chairman (Sir Andrew Lusk, Bart., M.P.) said that he thought that better times might fairly be hoped for both in respect to rates and losses. They had been exposed to excessive competition from non-tariff offices, but the chief offenders were now apparently conscious that any general reduction of rates could only result in disaster. The quinquennial valuation which had been made of the life business disclosed, he thought, greater material progress than on any previous occasion. The large surplus of 107,153l. was available for distribution between the shareholders and participating policy holders. There was an immense increase in the assets, an increase in the new business, and an increase in the activity of its representatives all over the country, which looked well for the future growth of the company. A dividend of 10 per cent. for the ensuing year was declared, and the retiring directors—the Marquis of Exeter, Lord Gilbert Kennedy, Lieut.-Col. F. D. Grey, and Mr. J. S. Mack,—were re-elected.

At the Stock and Share Auction Company's sale on Thursday, amongst the sales were: Swindon, Marlborough, and Andover Railway, 5 per cent. Preference, 7s. to 10s.; Lion Life Insurance, 10l. shares, 2l. paid, 23s.; South Darren Mines, 15s.; City of London Fire Insurance, 10s.; Confederate Bonds, 17s. 6d. per cent.; Investors Co-operative Society, 12 shares, 15s. paid, par.

At Redruth Ticketing, on Thursday, 759 tons of ore of 7 average produce, and containing 53 tons 5 cwt. of fine copper, were sold for 2853l. 19s. 6d., being 3l. 15s. per ton of ore, 10s. 9d. per unit, or 53l. 12s. per ton of fine copper in the ore, and an average standard of 92l. 16s. Subjoined are the particulars of the two last sales:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
May 17...	2012	...	...	...	...	451 15 0
" 31...	759	...	...	...	...	53 12 0

Compared with the last sale the advance has been in the standard 1l. 5s., and the price per ton of ore about 1s. 9d. The sales and amounts realised were:—Mellaneur, 514 tons for 1550l. 13s. 6d.; West Wheal Tolgus, 155 tons for 891l. 11s.; New Cook's Kitchen, 65 tons for 182l. 15s.; Mount's Bay Consols, 16 tons for 90l.; New Trumpet Consols, 9 tons for 139l.

BRATSBURG.—A report of the general meeting held on Thursday will be found in another column, and must be very satisfactory to the shareholders. Capt. Daw (the manager) stated that though the new machinery would not be ready for a few months longer, and they were not, therefore, able to work at all the best places, or carrying on the operations so rapidly and extensively as they could then do, he valued the copper ore now on the floors and in transit at 12,000l. to 14,000l., while they had been discovering three times the quantity they had taken away. He estimated the reserves in the ground opened at considerably above 200,000l. The company undoubtedly possesses a large and most valuable property.

ORGANOS.—That the crushing during the month of March was not larger, writes a correspondent, is, doubtless disappointing, being only 50 tons. The returns which have been made (an aggregate of 110 tons of quartz producing 152 ozs. of gold), present elements for encouragement and congratulation. The average amount of gold obtained—just 1 oz. 8 dwts. per ton of quartz treated—is most satisfactory when viewed by the fact that many gold mines make a handsome profit of only one-third of such a yield. The quantity of quartz crushed can indeed, he continues, leave no doubt in the minds of shareholders that the mine will prove rich and productive.

HOOVER HILL.—The third bar of gold, as advised by Mr. Frecheville, May 11, as having been shipped through Messrs. Brown Brothers and Co., was received at the company's offices in London on Monday; weight 126 ozs.

FRONTINO AND BOLIVIA.—The estimated working profit for March was 205l. 12s.; but against this 227l. 16s. has been expended on capital account. Less mineral was stamped than in February by 698 tons. The principal levels and works of development were, however, carried on, and the mines promise well. The April produce is expected to pass 2200 ozs., exclusive of bought gold. The Salada Mine kept up its yield (507 ozs.) due to the use of the Pocuné water. Rosario gave 184 ozs.; here, and in Córdoba, a great improvement has taken place in the lode.

ANTIOQUIA.—The estimated loss for March was 112l. 18s., in addition to 20l. 12s. expended on capital account.

DEVON FRIENDSHIP.—The bottom levels and the stopes are looking very well, and the new dressing machinery is working in a most satisfactory manner. The latter has already enabled 12 hands to be discharged. The returns are now expected to more than pay costs.

TREVAVEAN.—A large extent of tin ground is being opened for tributaries in the western part of the mine, near Williams' shaft, at and below the 27 fathom level, and at the same level in the course of a week Gooch's and Caddy's lodes will be intersected, and when this is done not only will the returns be immediately more than doubled; but as the work progresses they will continue greatly to increase, and it is the opinion of eminent mining experts that these two intersections will double the value of the property at the shallow adit. Stopping has just commenced on Gooch's lode. The mine will be in fork to the 100 fathom level before the end of this month, which will give large reserves of tin, all of which will yield profit to the company.

MOUNTS BAY CONSOLS.—The returns of tin for the last month have about doubled that of the previous one, and one of the numerous lodes now being worked on by tributaries has just returned a considerable quantity of tinstuff, producing more than 8 cwt. of tin to the ton—this result was the outcome of an operation conducted in the presence of Mr. R. Hunt, F.R.S., of the Mining Record Office, Jermyn-street, London, who expressed his great satisfaction at it. The No. 1 lode is daily increasing in value, and when the rise is completed, in a few weeks, an inexhaustible supply of rich tin ground will be laid open; additional stamp axes are being attached to the steam stamps, to deal with this immense increase. The manager is of opinion that the returns will be quadrupled. The outlay for equipment is now nearly completed, the monthly cost considerably reduced, and the returns are largely and rapidly increasing.

EAST WHEAL ROSE.—It is stated, on the highest authority, that within a fortnight the east lode will be cut at the 40 fm. level; driving on this lode will commence, and from the statements made by the miners who worked on this lode formerly, and are now again working on it, it will produce several tons of silver-lead per fathom, and, of itself, it would appear sufficient to make large profits, independent of the other lodes. The stopes on Innes' lode are maintaining their high character, and producing large quantities of silver-lead. The next parcel of lead will be sold in a week, and its value is expected to equal, if not to exceed, the value of the last, which realised a very high price. It is said that driving toward the celebrated Middleton's lode is being pushed on with all speed, and it is expected the lode will be intersected.

TREVAIRN UNITED.—At one of this company's mines the returns of tin are so satisfactory that profits are being made, and the lode is at this moment so rich that there can be no doubt they will, month by month, continue to increase. A private inspection just made states the value of the tin lode is nearly double that of last month. The results being obtained from the working of this mine have more than fully verified the reports sent from time to time. At another of the company's mines a new boiler is being added to the engine, which will enable it to cope with the large quantity of tinstuff now being sent to surface; and as the lode at the 30 fm. level increases in value as it approaches the rich shoot of ore gone down from the level above, similar and equally qualified results with those of the other portions of the property must be obtained.

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125 Colombian Gold, 6s. 6 100 Mona Consols. 40 Tankerville, 4s.
100 Chontales, 6s. 50 Mounts Bay, 3s. 15 Tolima A.
100 Devon Friend, 6s. 3d 20 New W. Caradon, 6s. 20 do., B.
25 East Blue Hills, 8s. 75 Nouveau Monde, 8s. 6 30 Victoria (Gold), 18s. 6
50 East Craven Moor. 50 Old Shepherds, 10s. 6 100 West Lisburne, 5s. 9d.
50 East Rose, 12s. 6d. 100 Parys Copper, 3s. 6d. 200 West Devon Con., 5s 6
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Every information relative to the progress of lode-tin mining in the Wild
River district (termed by geologists "The Cornwall of Australia") can be ob-
tained by communicating with the undersigned. CHARLES JENKIN.
"Herberton Advertiser" Office, Herberton, September, 1882.

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Notices to Correspondents

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VESUVIUS MINING COMPANY.—The address of this company is required. If there be no London office the name and address of the representatives here will do equally well.

TIN HILL COMPANY.—Will some correspondent state, through the Journal, whether Tin Hill Mine (Limited) is the same as old Tin Hill that was worked on the Cost-book System. If not the same, if old Tin Hill is still in existence. —A. B.: Hawick.

STAMPS AND TRANSFER OF SHARES.—"C. B." (Carlisle).—A Cost-book share transfer would not be exempt from the general rule—an adhesive stamp cannot be applied to an agreement after it is executed; and, assuming the seller to send an unstamped transfer, the fact of the buyer affixing a sixpenny postage stamp and cancelling it by signing across and dating it would certainly not convert it into a stamped transfer in the legal sense of the term. In the transfer of a limited company share the omission to state the consideration could not possibly exempt it from stamp duty. You will do well to consult your solicitor before attempting to economise to the prejudice of the revenue department.

Received.—"C. C. and Co." (Walsbrook).—"W. W.": "Crowded out; inserted this week."—"F. and B."—"E. S."—"W. B. P." (Bristol): If you will write on both sides of the paper we shall have to omit your communications—A Shareholder (who uses mourning paper because he could not speak at the meeting) should send his name and address, especially with personal statements—"R. T. M." (Lead Hills): Next week—"Economy": "No notice can be taken of unauthenticated communications."—"A. T." (Wandsworth).

THE MINING JOURNAL, Railway and Commercial Gazette.

LONDON, JUNE 2, 1883.

THE CHEMICAL PROPERTIES OF THE RETURN AIR IN MINES.

The Royal Commission on Accidents in Mines appears to have overlooked one most important item in the investigations in which they have been engaged during the last four years, and which has not yet terminated. In the preliminary reports they have given not a word has appeared with respect to the air in its chemical aspect, as it is found when it has performed its duty in neutralising the effects of gases and ascends to the surface. Our attention has been drawn to this by the action of the Prussian Fire-Damp Commission, which is now actively at work, and issue notes of what is being done, showing that the investigations will be of the most thorough and practical character. One branch of enquiry in which great interest is taken is the chemical examination of the air from the upcast shafts of a number of German mines. The nature of the air, of course, would depend a good deal upon the gases that are given off, and in some mines there would be scarcely any, and in others a considerable quantity. As a rule, however, the German mines do not give off anything like the quantity of gas that a great many in this country do, for at not a few of these, even in the early morning, it is not an unfrequent thing for the men to waft the gas away with their caps and jackets before commencing work. It may, therefore, be fairly assumed that were the return air in some of our mines examined it would be found to contain a much larger proportion of fire-damp than any of the mines in Germany. Yet we are told that Dr. SCHNODDER, of the Bochum Laboratory, found the air coming from the upcast shaft of a mine in Westphalia contained 1.05 per cent. of fire-damp, although the ventilation going on was at the rate of 30,000 cubic feet of air per minute.

At another well-known mine in Germany the air was impregnated with no less than 1.5 per cent. of fire-damp, where over 500,000 cubic feet of air was sent through the workings every minute. Even these returns show how a mine might gather such an amount of gas, owing to an interruption of the ventilating current, that would lead to an explosion in a very short time. This will be evident when we repeat that a mixture becomes in the highest degree explosive when the fire-damp is one-ninth or one-eighth of the total volume. Therefore, by chemically examining the return air the state of the mine, so far as gas is concerned is easily ascertained. If there is a high percentage of gas it shows that the ventilation is not sufficient, and that the mine is by no means a safe or healthy one, and that an immediate remedy should be applied in the shape of an increased quantity of fresh air being sent from the surface, or by splitting the currents. A record of the state of the air as it comes from the workings up the up-cast shaft of the principal mines in the districts in England and Wales that are termed "fiery" is highly desirable for many purposes and could not fail to result in improved systems of ventilation, and in increased comfort and safety to the workmen. The Royal Commission has not yet set in its final report, and before doing so it is to be hoped that it will follow the example of the Prussian Fire-damp Commission by investigating the chemical properties of the air from the up-cast shaft of certain mines in districts where they are known to give off considerable quantities of carburetted hydrogen gas. We have no doubt the Home Secretary would look upon such an addition as a most valuable portion of the report, as we feel sure all our mining engineers would do also.

COLLIERY ACCIDENT RELIEF FUNDS.

That colliery accidents cannot be entirely prevented is acknowledged by all who are practically acquainted with the business of coal mining, so that to provide for the survivors when these calamities do occur would appear to be not only praiseworthy, but an imperative duty of colliers and colliery owners alike; for it is an indisputable fact that although the public come forward and subscribe liberally upon the occurrence of these unusually fearful accidents, which result in the sacrifice of many lives, by far greater misery is caused by the more frequent fatalities which deprives but one or two families of their bread winners. It is to meet these cases that the fatal accident relief societies have been proposed in various districts; for, as it is truly said these associations will provide not only for the few fatal accidents which awaken public sympathy, but also for those minor cases which at present escape attention. The object of the Midland District Miners' Fatal Accident Relief Society is to provide for the widows and children of married members, and for the payment of legacies to the relatives of unmarried members who may be killed by those casualties which are of such frequent occurrence in and about coal or other mines or quarries, and a sum to defray the funeral expenses of members accidentally killed in and about the pits. This society, which it is explained, is essentially a workman's society, will relieve all the local clubs of the death-rate, and consequent liabilities, and will not interfere in any way with the present working of them. The committee earnestly recommend each and every member to look anxiously after the interests and welfare of the fund, and individually and collectively endeavour to further and advance and assist each other in carrying out the aim and objects of the society, and the principles laid down in the code of rules; bearing in mind that men who are dependent upon their own hand labour for the maintenance of themselves and families, are in duty bound to lay by something to provide for their wives and children.

To entitle a society of this kind to support from the general public it must be shown to be essentially a benevolent society and altogether unconnected with trade questions, such as from time to time arise between masters and workmen. In this respect the Midland District Miners' Fatal Accident Relief Society affords by its rules all the guarantee that need be desired. Its operations extend and are confined to the districts of Derbyshire, Nottinghamshire, Leicestershire, and Warwickshire, and it is provided that all moneys received on ac-

count of contributions, subscriptions, donations, or otherwise shall be applied towards carrying out the objects of the society, which, it is explained, are to provide a sum payable on accidental death and for the relief or maintenance of the widows and children of ordinary members who may be accidentally killed in or about coal or other mines or quarries. With regard to the benefits offered to the miners connected with the society, the rules provide that when any full member or half member meets with an accident causing loss of life, the funeral allowance shall be 5*l.*; there shall be allowed in addition for an unmarried full member, 10*l.*; and for an unmarried half-member, 5*l.*; and to the widow of a married member, the sum of 2*l.* 10*s.*, in addition to the funeral allowance of 5*l.*, and the sum of 5*s.* per week; the allowance to continue so long as the recipient conducts herself with propriety, to the satisfaction of the society. Any widow re-marrying shall be paid the sum of 10*l.*, in lieu of the weekly allowance; but such re-marriage shall not affect the allowance to the children. Notwithstanding the foregoing scale of allowances, the board shall have power, under special circumstances, and at their absolute discretion, on the application of the person interested, to commute the above allowances for such fixed sum as they may think reasonable. Each child of any married member, whose life may be lost through accident, shall receive an allowance from the funds of the society of 2*s.* 6*d.* per week. The payments to children to continue until the sons attain the age of 12 years, and the daughters the age of 13 years.

It must be obvious that such handsome benefits could not be offered in return for the comparatively small contribution of the working miners; but the stability of the society is ensured by the strength which it derives from its honorary members, who are interested in the miners' welfare. The rules provide that all persons shall be eligible for admission as ordinary members who are employed in the district in or about coal or other mines or quarries; and on payment of the contributions, hereinafter set forth, they shall be ordinary members, and entitled to the benefits of the society. All persons not being owners or lessors of mines and quarries, who assist in supporting the society with an annual subscription of not less than one guinea, or a life donation of not less than ten guineas, and all owners, lessees, occupiers, or workers of mines and quarries, who subscribe not less than 12*s.* per cent. on the amount paid by the ordinary members in their employment, and all lessors of mines and quarries who shall subscribe annually not less than 10 guineas shall become honorary members. Honorary members have the right to take part in the proceedings at any meeting of the local agency with which they are connected, and are eligible to hold any office in the society; but they have no claim to any benefit or emolument from the funds of the society. And there is a great inducement to acquire honorary membership from the advantages secured for one's workpeople, since if a member meets with a fatal accident while working at a colliery, or mine, or quarry, where the owner, lessee, or occupier is not an honorary member of the society, the benefits under the rules are reduced by 12*s.* per cent., or one-eighth.

The constitution of the society has much to recommend it, and the rules are framed with judgment and care, so that it may be anticipated that the society will prove permanently useful and successful, and afford all those philanthropically inclined a ready channel for contributing to the relief of the bereaved and destitute.

SCOTCH PIG-IRON WARRANT MARKET.

Mr. W. WILSON (Glasgow, May 31) writes:—The warrant market was flat during the past week, and the price another 6*d.* down. The shipments are good again for the week, and at Middlesbrough also they are heavy. Buyers are, therefore, more confident. Another furnace has been lighted at Chapelhall, making a total in blast of 117; this gives a weekly production in excess of the average of any previous year. 511 tons have been taken from store here last week, and 249 tons at Middlesbrough. Business was done during the past week at the following prompt cash prices:—

Thursday, May 24.	Friday, May 25.	Monday, May 28.
No market.	46/9 1/2, 46/9 1/2, 46/8	46/7 1/2, 46/10, 46/3
Tuesday, May 29.	Wednesday, May 30.	Thursday, May 31.
46/8, 46/9 1/2, 46/8	46/7, 46/9, 46/8	46/8, 46/9
Price of Scotch Warrants on May 28	182 1/2	181 1/2
Furnaces in blast in Scotland do.	117	109
Shipments of Scotch pig-iron for week ending May 26	14,130	9,760
Do. since beginning of year	247,549	250,110
Iron in store at this date	578,880	637,255
Price of Middlesbrough No. 3, May 28	39/6	43/3
Furnaces in blast Middlesbrough dist.	120	119
Middlesbrough iron imported at Grangemouth, week ending May 26	9,150	2,220
Do. do. since beginning of year	102,992	97,012

UNDEVELOPED IRISH BUILDING STONES.

When the union workhouses were first being erected a collection of Irish building stones was made by the Board of Works. The specimens of these stones during the late Mr. J. Beete Juke's lifetime were exhibited for public inspection in the Museum of Irish Industry; but since his geological collection was broken up they have been more or less out of sight. Among them were different Irish red granites. The Irish granites may be of metamorphic origin, or they may be of eruptive origin—that is, originally they were a molten mass, and were intruded into the rocks with which they are now associated. Nearly invariably those of the eruptive class are the best suited for tool work, as in them are three planes of "splitting," or "grain," while very often those of the metamorphic class have a tangled structure, and will not split easily or work kindly. The principal places for red granite in this country are the following:—South-East Wexford, where rocks of the metamorphic occur near Carne, and in surface blocks; while at Carnmore there is a very superior vein of the eruptive class eminently suited for tool work. On this vein a quarry might easily be opened, while the stone could be shipped from the new pier at Ballygeary. Very similar stone, and probably of the same age (Cambrian), occur at Tarmow, Blackrod Bay, County Mayo, and possibly in the County Donegal. Galway, however, seems to exhibit nearly the largest area of red granite, combined with the greatest variety. The larger amount of the rock is of the metamorphic class, but a considerable area to the westward is eruptive (Orney type) excellent stones being procurable in some places, such as Errisnagh and at McDara's Island. But it is in the vicinity of the town of Galway the greatest variety and handsomest stones could be procured; some are red, others grey, or of mixed red and yellow, or red, yellow, and green, also purple, mottled, or porphyritic.

One very handsome variety is a rapalcivi porphyry, another being of a rich chocolate colour, spotted with deep red and green, similar to those of the Continental porphyries that are so much prized. The ordinary red granites of Galway, like that in the pedestal of Dargan's monument, Leinster Lawn, in this city, are also found in Mayo and Sligo, between Castlebar and Coolaney, in the north-west and south Donegal, and near Pomeroy, County Tyrone. To the latter rocks, in Craigarragh and Garraquin special attention may be directed, as the rocks are of the "Orney" type, and if a quarry were opened it would be within a few miles of the Pomeroy Railway Station. In this neighbourhood also, near Beragh and Moneymore, there are, besides a newer red granite, very similar to those of Zugamoon, Kylemore, County Galway. Of these red Irish granites that could be brought easiest to this city are those of Carnmore and Pomeroy, while from Galway could be procured the greatest variety. The grey granites of Leinster, Dublin, Wicklow, Kildare, Carlow, and Wexford are well known. The handsome porphyry of Blackstairs, County Wexford, is not much in request at present. Grey granite also occurs in greater or less quantities in the counties of Galway, Mayo, Sligo, Donegal, Down (Mowma Mountains), Armagh, and near the town of Cavan. The orbicular granite, worked near Gorahwood by the Beestbrook Company, is very interesting, it being of tertiary age. There are rocks of very similar colour, but much older (Cambro-silurian), near Furbogh and at Murney, County Galway. There is also a peculiar Donegal serpentine or soapstone that cuts like cheese, and yet seems eminently adapted for outside

ornamental work, judging from the mullions in some of the ancient churches.

SOUTH-WESTERN COLORADO—THE SAN JUAN MINING REGION.

BY W. WESTON, M.E.

At this time, when there seems to be such a growing enquiry for suitable fields for emigration of our surplus population, and investment of our surplus funds, a few remarks on South Western Colorado by an Englishman who has lived on the frontier in that State since 1870 may prove of general interest.

Colorado is pre-eminently a mining state, and with her last year's yield of \$26,000,000 worth of gold, silver, copper, and lead, stands at the head of the mining countries of the whole world. This yield will be enormously increased in 1883, owing to the fact that the San Juan the richest portion of Colorado, has just been penetrated by the Denver and Rio Grande Railway, and thousands of mines have been brought into pay, whose ores, owing to the enormous cost of freight and supplies, were, prior to the advent of the railway, as so much waste.

In addition to this great yield of metals the coal output for last year is rated at \$4,500,000, and this will be largely increased yearly, as some 17,000 square miles of coal land has just been made available by the above railway, whose through line to Utah and the Pacific coast was completed last month, and passes directly through the centre of these coal fields, which are said to rival those of Pennsylvania, both in extent and quality of the coal.

About seven miles from the line of the Denver and Rio Grande Railway, and 25 miles from the prosperous mining town of Ouray, there is a coal field as yet almost entirely undeveloped and unprospected, which from the surface outcrop is known to cover an area of at least 2000 acres, the coal being 30 ft. in thickness; and as this is in close proximity to the numerous gold, silver, copper, and lead mines of Ouray County, in the San Juan region, its importance can hardly be estimated. Then 100 miles from Ouray, and her mines, are the coal fields of Gunnison County, already estimated as covering an area of 15,000 square miles, 3000 acres of this being anthracite, and the rest bituminous coal.

Two years ago these South-Western coal fields were unknown, and there was no railway in the region. A railway now runs through the centre of them, and last year 26,300 tons of coal were mined and shipped. What will be the magnitude of this coal industry in future is impossible to estimate. The Denver and Rio Grande Railway, as before stated, has brought thousands of gold and silver mines of the San Juan region into pay, which before its advent were worthless; smelters and other reduction mills are being erected, coke ovens are being built, fertile valleys hitherto neglected are being turned into fruitful farms; thousands of heads of stock are being driven in, and the South-Western portion of the State, which is the richest in the noble metals, is undergoing a complete revolution. Such is the difference between building railways in the Old and New World. Here they are built when the press of actual business demands it; there, they are built to make the business and build up the country.

The beds of iron ore in close proximity to these coal fields are numerous and practically inexhaustible and fresh ores are constantly being discovered. These, up to a year ago, were looked on by the prospector as worthless, and I myself, prospecting in San Juan in 1877, have passed over many a one, without taking the trouble to put a stake on it. But the advent of the railway is bringing these, too, into request. In 1882 Bessemer steelworks were erected in Pueblo, and 17,000 tons of steel rails turned out, and other kinds of manufactured iron and steel bar iron for rails in mines, 22,000 kegs of nails, and 21,000 tons of steel ingots.

The New York Mining Record, reviewing the increased mineral product of the State, in an editorial headed "Colorado as a factor in the field of Mining Industry," says as follows:—"It is because of the mineral resources of Colorado, and their steady development during the past five years, that there are to-day 3088 miles of railway in the State, of which 880 miles have been constructed during the last year, and of which nearly 2000 miles have been built since the re-monetisation of silver in 1878. From the same cause almost directly has it come to be that there are about 1,000,000 sheep in the State, worth \$2,500,000, giving a wool clip last year worth \$1,000,000, while furnishing meat worth \$350,000. From the same influence has it been that the wheat crop of the year reached 1,533,740 bushels, oats 1,083,287 bushels, corn 600,000 bushels, and barley 261,185 bushels, and that the plains and valleys of the State swarm with herds of cattle, assessed at \$5,435,616, and that as much as \$3,138,000 is the assessed value of the horse property in the State. From the past year's aggregate of mining results in Colorado should be drawn a pregnant lesson as to the vast importance to the country of its possession of so much mineral wealth awaiting development."

Of the \$26,000,000 produced last year by the State of Colorado, some \$17,000,000 were produced from the phenomenally large and rich silver-lead deposits of Leadville, and now another similar field of ore as to form, an immensity of the deposit, has been discovered in what is known as the Red Mountain district in Ouray County, and only eight miles from the town of Ouray. Last August a prospector, while hunting deer, sat down on a log to rest, and, picking up a stone, was astonished at its great weight, but on breaking it open it proved to be galena. He then went to work, and soon discovered the enormous body of ore now known as the Yankee Girl Mine, and in September sold it for \$125,000 cash, and during the past winter four men have taken out, sacked up, and sold 1000 tons of ore, which netted the owners 11*l.* per ton in St. Louis, over 1000 miles distant by rail. The altitude of this mine is 10,300 ft. above sea level, and as it was not worked to any extent till October, snow was deep on the ground before the excitement began; but, since then, a dozen big paying mines, of the same kind as the Yankee Girl, have been discovered, the prospectors living and working in 10 to 20 ft. of snow. Four towns have been laid out, 300 to 400 houses built, and roads in course of construction from Ouray to the mines. As far as can be determined by the work done to date, the beds of ore vary in thickness from 2 to 40 ft., and the ore is of two kinds—galena and an antimonial copper glance, these ores carrying from 20 to 200 ozs. of silver to the ton, with some gold and a large percentage of copper and lead. The ore is solid, and more resembles a furnace product than that usually found in vertical fissure veins.

It is estimated that there will be at least 5000 miners in the Red Mountain district this summer, and the development of immense ore bodies bids fair to astonish the world, as did Leadville. When I was there last January many of the prospectors were living in tents in the snow, and sinking shafts to strike the ore beds. It will give some idea of the orebody and its solidity when I state that at the "Yankee Girl" Mine I saw two men breaking down the ore, and two men sacking it, and these four men loaded a mule train daily with 10 tons of ore. No hand-dressing was done, the ore being simply broken up small enough with a rock hammer, and then shovelled into sacks.

In San Miguel County, adjoining Ouray County, are some wonderful gold and silver mines, notably the Mendota, Sheridan, Smuggler, and Union, adjoining claims on one vein, the ores sold from these yielding from 108 ozs. silver and 1 oz. in gold per ton to 561 ozs. silver and 16 ozs. of gold per ton, these being the highest and lowest returns of ore sold. The ore sold from the Smuggler, however, actually averaged over \$500 in gold and silver per ton. The whole of this San Juan is as yet in its extreme infancy, from the fact that until two years ago it was 300 miles from a railway, and the Ute Indians occupied the Uncapahgre Valley at the base of the mountains where the mines are, and the inaccessibility of the place, added to the numerous scares from marauding redskins, effectually kept capital out of the country. "Mais nous avons changé tout cela," the United States Government has transplanted all the Indians to a far distant reservation, and the Denver and Rio Grande Railway are running through trains from Denver to Utah, and the Pacific Coast, passing through the Uncapahgre Valley, and within 35 to 40 miles of the mines of Ouray County, the richest in this now celebrated region.

The benefit which this plucky line of railway has conferred upon

the State of Colorado is incalculable. The Union Pacific monopoly which was only a through line to California, running through the northern or plains portion of Colorado, did the State more harm than good; but the Denver and Rio Grande has crossed mountain ranges at altitudes of 9000 to 11,000 ft. above sea level, penetrated into the heart of the richest mining region of Colorado known as San Juan, made paying mines of thousands of prospects whose ores were until then so much waste, opened up new coal fields, populated the fertile valley of the Uncompahgre with farmers and stock raisers, linked this mining region with Utah and California—its natural mart of supplies—and broken the Union Pacific monopoly by giving a line to California *via* Denver, through the grandest scenery of the Rocky Mountains. Indeed, it has been aptly named the "Scenic Line" of America.

The San Juan mining region, which is on the Pacific slope of the Great Divide, or main range, of the Rocky Mountains, until last month was dependent for supplies on the Atlantic slope—a very anomalous condition of things—now, however, it will get its bread-stuff, dried fruits, &c., from the fertile State of Utah, its next door neighbour, and fresh fruit and mining supplies and machinery from San Francisco. At Ouray, the principal town of San Juan, we are already receiving 9¢ per ton more for our ores than we did in 1880. Owing to the reduction in freight labour, and supplies caused by the advent of the Denver and Rio Grande Railway, and a branch is about to be built from the main line to Ouray, a distance of 35 miles, the cost of turning the ore into dollars will be still further reduced about 3¢ per ton. Thus, a tremendous stimulus has been given to prospecting for fresh mines, and to the production of ore, for hundreds of poor men who have been hanging on for years to their mining claims, whose ores would not pay a margin to ship, and with difficulty being able to scrape money enough together to enable them to do the yearly assessment work prescribed by law, suddenly find themselves in possession of paying mines, owing to this immense reduction in the cost of producing the ore and getting it to market.

I have mined in San Juan since 1877, and I state, as a positive fact, that the region is only half prospected; important discoveries of gold, silver, lead, copper, iron, coal, and other valuable minerals are being made daily, and will be made for the next 10 years to come. It is a new country and a fabulously rich one, and, therefore, unequalled as a field for the capitalist, artisan, miner, farmer, prospector, or mining engineer. To a young man with average brains, muscle, and energy, and, say, 300¢ in his pocket, here is a grand opening. Let him take a course of instructions in the assaying of the ores of gold, silver, and lead in the Royal School of Mines if possible, or, if not there, in any first-class school of assaying in London. Then let him "strike out" for San Juan and spend a summer on the hills. He can get a partner out there who understands prospecting, and if they find anything of real value he will have no difficulty in selling it, or getting capital to work it by giving up an interest in it for money to be spent in development.

The mountains swarm with big and small game, and the streams with speckled trout, and the climate is as healthy as any in the world.

The Mining Laws of the United States and the State of Colorado are as near perfect as they can be made, and most liberal. The law gives the discoverer of a mineral lode or vein 1500 ft. in length by 300 ft. in width along the course of the vein, compelling him to do annually \$100 worth of work in order to hold it, or if he do \$500 (100¢) worth of work, giving him an United States patent, which is absolute title for ever.

THE CLEVELAND IRONSTONE MINES—THEIR RECENT DEVELOPMENT AND IMPROVEMENT IN THE METHOD OF WORKING.

BY C. T. HUTTON-LE-HOLE.

The Cleveland iron trade is entirely the production of the present century. It is, however, evident from the heaps of half-smelted iron and slag to be found on the vast North Yorkshire Moors (near to the remains of Roman camps) that the Romans had extracted iron from the stone. In Dugdale's Monasticon it is recorded that in the year 1209 there was an iron forge in the Vale of Rosedale belonging to Robert De Stuteville. The birth of the present trade, so far as Cleveland is concerned, cannot date further back than the year 1850, although it is stated that in the years 1811 and 1836 samples of the ironstone were sent to the Tyne ironmasters who pronounced it to be worthless rubbish. In 1848 Messrs. Bolckow and Vaughan tried it at their Witton Park Ironworks, in the county of Durham, with such satisfactory results that a small regular supply was sent, but it was not until the year 1850 that the Cleveland Main Seam, now so extensively worked, was discovered. Since then up to the present year about 154,000,000 tons of ironstone has been worked out of the Cleveland and North Yorkshire district.

The mines at present worked are situated south of the River Tees in the vicinity of Eston, Marske, Guisborough, Skelton, Brotton, and Loftus, and at Rosedale and Grosmont. This district is now studded all over with villages (many lighted with gas) where 20—nay, in some cases only 10—years ago the only houses were those inhabited by the farmer and his labourers. On the seacoast also the aspect of things must have strangely altered even within the knowledge of men now in their prime, for at Saltburn and on to the wild sea-rent gully of Skimmingrove, where 50 years ago an extensive smuggling trade was openly carried on, the coast is now occupied by the busy miner, and blast-furnaces, engine-houses, and other equally unpicturesque buildings stand out on the cliffs. The present output from these mines amounts to over 2,000,000 tons per annum. The mines which have been lately opened up have been fitted up upon a much larger scale than those of an earlier date. The Qumpey, a newly opened mine near Brotton, when fully opened is intended to produce 1500 tons each 8 hours worked, and at the Upleatham Mines about 1200 men are employed. It is computed that the district now opened up alone will last for another 100 years (at the present rate of production) besides which there are large tracts of ground as yet untouched which the Cleveland Extension Railway, now being constructed, will open out. It has been estimated that each blast-furnace requires about 70 miners to supply it when in blast with ironstone.

Of late years great improvements have been made in all branches of mining operations, both in the ventilating and mode of working underground, and also in the mechanical work; and the Cleveland mineowners have not been slow in adopting the improved appliances which this age of progress has placed at their command. The result is that during the past few years new and mechanical means have been introduced into many departments with success to the mineowner, and additional comfort and safety to the miner. Perhaps it will not be out of place to refer here to some of the most important changes which have taken place in the way of working the ironstone. We will take four instances.—(1) the means of ventilating the mines; (2) the introduction of compressed air as a motive power; (3) the system of mechanical drilling of the shot holes (which until very recently has been done solely by hand labour); and (4) the haulage of the wagons of ironstone by endless rope on the underground main roads instead of using horse-power.

(1) Ventilating.—The early or primitive means used was that of hanging a fire-lamp at the top of a bratticed shaft, or in the case where the mine could boast of two pits at the top of the upcast shaft, but as the area of the workings extended and the number of men employed increased the air became increasingly more vitiated, the underground furnace became universally adopted. The furnace in its turn, after many years use, is also rapidly becoming obsolete as the many advantages of mechanical ventilation are better known. With the furnace, under the most favourable circumstances, 93 lbs. of coal per hour was required to realise 1-horse power in the air withdrawn. Whereas with the Guibal fan the consumption of coal varies from 10 to 16 lbs. per hour per horse power of ventilation produced. The saving in fuel in this system, as compared with the furnace, is sufficient to repay in two years the cost of the appliances. There are two systems of mechanical ventilators used in this district. The centrifugal principle, as in the Guibal and others, and what is known as the displacement machines, such as Cook's, which exhausts

air by means of chambers of varying capacity. Much depends upon whether the mine affords favourable conditions for testing their capacity, for instance a fan at one mine might yield as high a percentage of useful effect as 75, while a similar fan at another mine would, perhaps, only produce 25 per cent. Explosions of gas in these mines are of very rare occurrence, and are usually due to the oily vapours exuding from the shales above. The Upleatham Mines are ventilated with two of Cook's powerful ventilators, each of which is 11 ft. 6 in. diameter, and 15 ft. long. The two machines send into the mine 50,000 cubic feet of air per minute each.

(2) Compressed Air as a motive power is now extensively applied in underground work; the air is usually compressed at surface to 45 or 50 lbs. per square inch, and conveyed down the shaft in pipes, and thence along the levels up to the face of the ironstone to work either the mechanical drill or the haulage by endless rope.

(3) Mechanical Drilling has only been introduced into the Cleveland mines during the past six years. The ordinary mode was—and is now at many mines—by hand drilling, by which system the miner gets upon an average 5½ tons per day. Each ton of ironstone requires about 6 ozs. of powder to blast it, and this powder has to be paid for by the miner. The mechanical drill in use is that patented by Mr. W. Walker, of Saltburn, which was designed specially for the Cleveland ironstone, and the other machine is on the percussive principle. The Walker machine, with a steam pressure of 40 lbs., drills holes 2 in. in diameter at the rate of 2 ft. per minute, and at one mine one of these machines is getting 80 tons of ironstone per shift of eight hours. Two skilled miners with this machine will do the work of nine men by the old hand system. The tons of ironstone per hole drilled by the machine is about three. Each hole is from 4 ft. to 5 ft. deep. The actual time of drilling is under 1-20th of that necessary for the same operation by hand. The value of this system in the outlying districts where skilled men are scarce cannot be over-estimated.

(4) Haulage by the Endless Rope System has been in vogue since 1867, but more generally adopted at these mines during the last few years. It is very economical, and the power required to work it is small compared with that used in other systems, the slow and continuous movement resulting in an almost total absence of friction, which reduces the wear and tear of the rope, wagons, &c. materially.

GOLD MINING, AND ITS MANAGEMENT—No. VI.

By THOMAS CORNISH, M.E. (late of Australia).

Author of "Gold Mining: its Results and its Requirements," "Our Gold Supply: its Effects on Finance, Trade, Commerce, and Industries, &c."

In Sandhurst (Victoria), the noted quartz mining region of the colony, having been many instances of marked success in gold mining, not only to many joint-stock companies, but several private mine-owners, who have been exceptionally fortunate in striking rich reefs in their claims, have become millionaires, and are still in receipt of enormous incomes.

The system inaugurated for developing the resources of the district was in the early days such as tended to retard rapid development, and caused much waste of time, capital, and labour. The claims were too small, and consequently caused the sinking of more shafts than was necessary for efficient working. In many places I have seen 10 or 12 shafts sinking on or for a lode where there only ought to have been one—a good main shaft, a suitable size for going down to a great depth. Many companies were in existence for years sinking a shaft to a depth of 300 to 400 ft., dawdling over the work by only employing a few men, where with energy and at less cost the same work might have been done in a year.

When progressive or prospecting labour is determined on it should be pushed on with all expedition possible, as the quicker the results are proved the better and cheaper will it be for those who have to pay for it. Thus in shaft sinking as many men should be kept below as can conveniently work; there is no more surface labour required for four, five, or six miners working in a shaft than there is for two, while more than double or treble the work gets done during the same time.

In quartz mining it is generally necessary that the main shaft should be kept continually sinking, while levels should be opened for development at intervals of from 60 to 100 ft., as experience may guide the manager. The neglect of keeping progressive work well ahead is oftentimes attended with much loss, not only in time wasted but in depreciation of the value of the mine.

As an instance of this, I remember a noted mine which had paid very handsomely in dividends for years amounting to something between 300,000¢ and 400,000¢, and on its success the stock in the company and its tributes had become inflated to a price representing nearly 1,000,000¢. I inspected the mine in 1872, and on reaching the bottom level at 600 ft. I noticed, from the state of the shaft, that no sinking had been carried on for a long time, and found on inquiry from the mining manager that it had been standing at that depth for six years. On examining the workings I could soon perceive that the bulk of the good quartz had been worked out, and that no preparation had been made to keep up the supply at deeper levels. The management had been defective, and the mine had evidently been worked for market operations more than effective working. The consequence was when the state of the mine became known the value of the stock fell nearly 800,000¢ in a few months, or more than enough to pay the entire wages of all the 6000 miners working in the Sandhurst district for 12 months. Now, the loss of that money, or any portion of it, was not really losses in mining; but merely losses in gambling and speculation. The mine had for years been a wonderfully profitable one, and if it had been worked according to the principles of legitimate mining the stock never could have been subject to the chances of such a sudden and enormous depreciation.

One of the greatest wonders in connection with gold mining industry, when any new discoveries have been made, and a rush sets in for investment, is the surprising rapidity with which mushroom authorities spring into existence. Men who by a fluke have made a lucky speculation in shares, or obtained a concession or claim in or near a locality where gold might have been seen or expected to be found, arrogate to themselves the position of oracles or authorities on the subject of gold mining, and impudently assume a knowledge of an industry that can only be acquired by long practical experience and intelligent application.

Men who never saw a gold mine, nor know nothing of the proper method of working one, will write reports and undertake the control of works of which they are completely ignorant. The natural result follows that large sums of money become squandered in the purchase of mines at fabulous prices, and afterwards wasted in disgraceful management. At the expense of the shareholders and their unfortunate dupes these mushroom authorities enjoy a butterfly existence during a brief period of sunshine (while the money holds out), when they suddenly collapse, and fall into the obscurity from whence it is a pity they ever emerged. The mischief created by these new chum authorities on gold mining is, however, incalculable, as it is not merely the money they waste in gaining experience and making a muddle of everything at other people's expense, but their utter incapacity brings discredit upon the industry of gold mining generally, and retards the development of legitimate mines by experienced persons.

The reports which have appeared from some of the so-called managers of mines in India and West Africa from time to time since the rush set in for mining in those places have been enough to condemn the writers as utterly incompetent for the positions they have undertaken, and the shareholders are beginning to find out to their cost the mistake they have made in their selection of directors and managers, whose chief qualifications have been bumptiousness and entire ignorance of the practical details of gold mining.

In the Indian mining, of which such a *furore* was made without sufficient cause, there was never anything to show, not even from the first reports of Mr. Brough Smyth, that the mines would ever meet the sanguine expectations of the vendors and shareholders. The reports and prospectuses as they appeared when analysed by any practical miner were found to contain no substance or facts to go upon; it was mostly bunkum and moonshine, based upon suppositions and theory. Very little, or, in many cases, no

practical development had been done, some outcrops or blows of hungry looking quartz were magnified into permanent reefs, without having been sunk on or prospected a foot below the surface. Assays were made from picked samples of stone, on which were based calculations of profits of the most wonderful kind. Clever mathematicians produced an array of figures of such charming exactness that were quite amusing to read, and that had such a fascination upon admiring shareholders that many had, no doubt, built their ethereal castles as to how the enormous profits were to be enjoyed in the future, little dreaming of the utter collapse of the brilliant prospects as shadowed forth by the vendors and directors.

There was nothing in any of the glowing reports and prospectuses as issued at the time to warrant any of the ventures being considered (by practical authorities) otherwise than as prospecting mines, and not worth paying large sums of money for the privilege of looking for gold in an entirely new mining country.

Prospecting for gold is a very legitimate undertaking when capital and labour are united and judiciously expended in developing the resources of any likely looking country. The best gold fields in Australia and America were discovered by energetic prospectors who pushed forth into the bush, forests, and mountains beyond where others had been. There is a wide difference between a prospecting mine in a new country and a well developed, or even a partially developed mine in a well-known mining district. Had the Indian mines been treated as purely prospecting mines until well developed and proved payable or otherwise, the work might have been done at a very moderate outlay in comparison to what has been so lavishly and injudiciously expended; high born hopes would never have reached the pitch they did, nor would the wail of losses been so great as is now the case, after so many failures.

I know of some practical men who were engaged in India, who, because they honourably advised their companies not to waste more money in what they believed would be a fruitless effort in prospecting, offended the directors, and in some cases were rewarded with dismissal for their honest opinion. When a doctor is compelled to tell his patient, or a lawyer his client, that his case is hopeless, he only offends the individual patient or client; but when a practical mining engineer reports unfavourably against a mining property he is sure to offend the great bulk of shareholders and directors who employ him.

SOUBACK AND CATIR ALAN MINING COMPANY.—A reference to the report will show what a large amount of work has been executed for the purpose of opening out the mines at several points so that large and regular returns must be made, a far preferable course to that so often adopted of making early returns which cannot be kept up. The company has set a good example in bringing home sufficient quantities of rich and poor ore to demonstrate beyond all question the richness of the mines they have, the ore having been sold at from 7½ 19s. 6d. to 1472¢ per ton. Such a large quantity of ore is now available as will enable the company to keep up regular and increasing dividends. The directors are now inviting subscriptions for their EIGHT PER CENT. BONDS, repayable in eight years with 50 per cent. bonus, that is at 15¢ for each 10¢ bond, or if the bondholders prefer it they can, after June, 1884, require repayment at par at six months notice. The direction is one of the strongest which has appeared on a mining company's prospectus, embracing amongst others the Minister of Public Works at Constantinople, Earl Poulett, the ex-Governor of Newfoundland, and Admiral Hobart Pasha. It may be mentioned that the latter gentleman, who is at present residing in London, was present at her Majesty's levee on Monday in the Diplomatic circle, accompanying the Turkish Ambassador, and that Hobart Pasha and the Hon. Mrs. Hobart-Hampden had the honour of dining at Marlborough House on Sunday evening. As the Pasha is Musheer of the Turkish Navy, and one of the Constantinople directors, it cannot be doubted that he would have great influence in Turkey to secure the proper recognition of the company's rights, so that it is very reasonably urged that full confidence may be felt that the funds subscribed will be judiciously expended. The prospectus will be found in another column.

ELECTRICITY AS AN ILLUMINANT.—At the recent Gas Managers' meeting at Cincinnati, the President—Mr. J. B. Howard, of Dubuque, Iowa—remarked, in the course of his address that whether the new candidate for popular favour as an illuminator shall ever attain to any degree of permanent success depends upon its possessing the qualities which he named; but for outdoor lighting and for large buildings it has already pressed to the front, and is at the present time in use in most of the larger cities of the Union. The lights, however, have to be carefully tended, and an engineer kept for that purpose. Candour compels us, however, to admit that the electric light is a very beautiful and brilliant one, and perhaps has a place or sphere peculiarly its own, which it may attain and hold. To be sure, the incandescent light can be turned off and on like gas; but one peculiarity of electric lighting is the fact that, as the size of the light is reduced the proportionate cost of producing it is very largely increased; and, as we view the entire field at present, there is nothing in the electric light that gas companies may fear.

PREVENTION OF FLOODS.—Much valuable information concerning the conservancy, prevention of floods, drainage, and water supply of rivers is given in the anniversary address of the President of the Norwich Geological Society—Mr. J. H. Blake, of Her Majesty's Geological Survey, A.M.I.C.E., F.G.S. The subject is systematically and thoughtfully treated, and will well repay careful study.

MANUFACTURE OF IRON.—For so treating common iron whilst in the puddling furnace that it is cleansed from all impurity, greatly improved in quality, and increased in bulk, Mr. W. CLARKE, of Birmingham, proposes to apply to the iron whilst under the process of puddling a mixture consisting of about 3 lbs. of Tafia ore, an ore very rich in metallic iron found in North Africa, or of other ore possessing similar constituents, such ores being found also in Algeria and in Spain; 3 lbs. of iron pyrites, commonly known as purple ore or "Blue Billy"; 4 ozs. of wood sawdust, and 8 ozs. of bay or rough salt. These materials being reduced to powder, and thrown upon the iron whilst in the boiling state in the puddling furnace are sufficient for one charge or heat of 4½ cwt. of pig iron. The result is a highly improved quality of iron thoroughly cleansed from phosphorus and a larger yield from the same charge of common iron.

IMPROVED BOILER COVERING.—With a view to prevent the radiation of heat from steam-boilers Messrs. ROBERTS and TRAVIS, of Fallowfield, propose the use of a layer of ground or otherwise disintegrated cork (which is a very efficient non-conductor of heat) in combination with the ordinary composition or material usually employed. In carrying out the invention in connection with a steam-boiler they first coat the upper surface with a layer of the ordinary composition or material, such layer being much thinner than usual. Over this coating, when dry, they lay on a coating of 1 in. thick (more or less) of the ground or disintegrated cork, pressing the same down closely, and over this they lay on a second coating of the ordinary composition or material, so that there is a cavity of about 1 in. thick between the two layers of the ordinary composition or material, which is filled in with the ground or disintegrated cork pressed closely together; and it will be found in practice that the use of this material (ground cork), in combination with the ordinary composition or material, in the manner described, will most effectually prevent the loss or radiation of heat from the surface of the boiler.

CONVERTING CAST-IRON INTO STEEL.—To convert iron castings into steel or steely iron castings, by a simple method and inexpensive apparatus without using ore, ashes, or any other materials to mix with the castings whilst they are being converted, Messrs. BOND and WHITELEY, of Tow Law, Durham, propose to construct an oven containing a chamber or a number of chambers, which shall be so arranged that the flame can only pass around the outside of the said chamber or chambers. They place the castings, which are made of cast-iron, into the chambers, the ends of which are afterwards sealed up. The furnace under the oven is then ignited, and the castings

kept at a certain head for a suitable length of time, whereby they are converted into steel or steely iron.

THE BRATSBERG COPPER COMPANY.—The statement which Capt. Daw, the manager, made to the shareholders who assembled to meet him on Thursday, was altogether satisfactory, and even exceeded the anticipations of those who had already formed a high opinion of the value of the property. The chief points in Capt. Daw's statement are as follows:—The mines are turning out much better than was expected, and this year's production will be considerably better than last. A steamer is about to be placed on the lake, which will greatly facilitate the transport of the ore; a canal is proposed to be made, which, when 9 miles are made (which will be in about a year), will effect a saving of 10000 l. a-year in the carriage of ores, and when completed will effect a saving of from 30000 l. to 40000 l. a-year; there is an ample supply of water and plenty of timber; and, what is perhaps more important than all, there are more than 200,000 l. worth of reserves, valuing them at the present price of copper. During the past year three times as much ore has been discovered than taken away. But perhaps the best proof of what the mine can do is to be found in the fact that in the first year's working by the present company the mine paid a dividend of 5 per cent., and the directors have no doubt whatever that this dividend will be largely increased. One gentleman at the meeting, who has examined the property, expressed his belief that when thoroughly developed Bratsberg will be found to be as valuable a property as the celebrated Cape Copper Mine.

FOX'S CORRUGATED FLUES.—An interesting series of official trials of the strength of these flues have been conducted for several days in succession at the Leeds Forge Company's Works, under the direction of Mr. T. W. Trail, chief engineer surveyor to the Board of Trade, and Mr. Peter Samson, assistant chief engineer surveyor to the Board of Trade, for the purpose of establishing new Government rules for the pressures to be carried in the boilers of passenger steamers obtaining the Board's certificate. A great many former tests of the different constructions of boiler furnace flues, including Fox's patent corrugated flue, have been made at their works; but those of Fox's patent tested last week showed that very great advances as to their powers of resistance and other qualities have resulted from the methods of manufacture now being carried out entirely by the new and specially patented machinery laid down during last year. The advantages of machine-made flues are proved to be such that it is considered a new rule should be at once laid down by the Board of Trade to their surveyors and shipbuilders, showing the extension of pressure these flues are entitled to carry according to the exhaustive series of trials which have been made.

MIDDLESBOROUGH BASIC STEELWORKS.—The first blow was made at the North-Eastern Steelworks on Thursday. The works are specially designed for the manufacture of steel from Cleveland ore. The phosphorus contained in the iron of the first "charge" of the converter at yesterday's experiments was between 3 and 4 per cent.; and careful analyses of the foreign substances afterwards found in the newly-blown steel resulted in the discovery of only 2 per cent., which is about one-fourth of the quantity usually contained in steel made from the purest hematites. The experimental "blow" was considered eminently successful, and was witnessed by Mr. Gilchrist, one of the patentees. Five tons of ingots were blown. The machinery in the works is found to meet the requirements of a firm determined to produce pure steel, the works having been laid out with a view to making rails, billets, &c., for plates of all descriptions and qualities.

TIPTON GREEN COLLIERY COMPANY.—The final meeting has been held for the purpose of hearing a statement as to the winding-up of the company and other matters. Mr. John Shepherd presided. Mr. J. C. Malcolm, the solicitor for the liquidators, was present. The report and balance-sheet of the affairs of the company showed assets available for distribution amounting to 1708 l. 12s. 11d., out of which a first and final dividend of 10½d. had been paid. There being a small surplus left, a portion of it was presented to the liquidators, and the remainder, after a payment had been made on account of rent of room, was granted to the small loan owners who had suffered. The report was adopted, and the meeting handed over the books, documents, &c., to the custody of Mr. Malcolm. The debtors' discharge was granted.

DERBYSHIRE AND CHESTERFIELD INSTITUTE OF MINING, CIVIL, AND MECHANICAL ENGINEERS.—At the meeting on Thursday next the papers open for discussion will be Mr. Sydney F. Walker's "On the electric light and transmission of power by electricity;" and Mr. T. G. Lee's, "On a self-acting arrangement for unloading and loading colliery cages (Fisher's patent)." The papers read or taken as read will be "The Kope system of winding at the Bestwood Collieries," by Robert Wilson, Assoc. M.Inst.C.E. (communicated by Mr. Howard Allport); and "Bucket's calorific engine," by Mr. John Oliver.

TIN PRODUCTION OF THE WORLD.—At the annual meeting of the Royal Institution, on Tuesday, the President—the Earl of Mount Edgumbe—stated in his inaugural address that since 1825 the total production of tin throughout the world had increased more than threefold. Last year it was:—Cornwall, 9400 tons; Banca and Billiton, 8599 tons; Straits of Malacca, 11,705 tons; Australian, 10,067 tons; Peru and other countries, 500 tons = 40,271 tons. This scarcely supports the too frequently repeated assertion made by Cornishmen that the Australian tin deposits are unimportant.

NEW TERRAS.—This mine is now again attracting attention. The company congratulates itself on having acquired one of those rare prizes in which success is already ensured. It will be remembered, writes a correspondent, that some years ago, previous to the great and unprecedented fall in the price of tin, the discovery made here caused a great sensation, and the shares went to about 700 per cent. premium. Thousands of pounds worth of tin were sold shortly after the discovery, and the company entered the Dividend List. The subsequent great fall in the price of tin, combined with careless management, caused operations to come to a standstill, and until the present company took over the property last year nothing had been further done; they are now working vigorously, and before very long this must rank amongst the most successful tin mines in the St. Austell district, not even excepting Wheal Eliza, the dividends in which once reached 100 per cent. for the year.

REDMOOR.—A successful starting of two of the largest size pneumatic stamps, supplied by Messrs. Harvey and Co., of Hayle, took place on Monday last, and they proved capable of treating an immense quantity of tin-stuff. A large number of miners could now be employed on two tin lodes which are laid open for stoping from the 30 down to the 125, or bottom of the mine.

WHEAL SISTERS.—At the meeting on Tuesday the accounts showed a debit balance against the adventurers of 2312 l. It was resolved to make a call of 15000 l. (5s. per share). The bankers' pass-book was laid on the table, together with a statement of the ledger balances, showing a debt due to the bankers of 2049 l., and for lords' dues 126 l. In the accounts presented the dues were charged at 1-60 instead of 1-24, which it was believed the lords would accept during pleasure.

NEW TRUMPET CONSOLS.—There is reported to have been considerable enquiry for these shares, not only in expectation of meeting with a large body of tin at the 28 fm. level, seeing the present character of the lode, but also through the price obtained for two sample lots of copper sold at the Redruth Ticketing on Thursday. Five tons realised the price of 10 l. 6s. per ton, and 4 tons 21 l. 5s. per ton. There is considered to be very little doubt but the company possesses a prize of great value.

CASELL'S PUBLICATIONS.—Archdeacon Farrar's Life and Work of St. Paul, part 17, contains the continuation of the chapter on the Second Epistle to the Corinthians, and the commencement of that on Paul's second visit to Corinth. Knight's Practical Dictionary of Mechanics, part 78, extends from Suture-instruments to Tapping-gouge.

THE ALLOTMENT WILL BE MADE IN THE ORDER APPLICATIONS ARE RECEIVED.

The Souback and Catir Alan Mining Company (Limited).

DIRECTORS.

His Excellency HASSAN FEHMY PASHA, Minister of Public Works, &c., Constantinople.
Admiral HOBART PASHA, "Musheer" of the Turkish Navy, 17, Berkeley-square, W.
The Right Hon. the EARL POULETT, Hinton St. George, Somersetshire.
Sir STEPHEN J. HILL, C.B., late Governor of Newfoundland, Springfield House, Caversham, near Reading.
OCTAVIUS WARRE MALET, Esq., late Bengal Civil Service, 14, Manson-place, Queen's-gate, S.W.
CHARLES EDWARD AUSTIN, Esq., Mem. I.C.E., 1, Westminster-chambers, London, S.W.
MOHAMED ARIF EFFENDI, Eulema, Constantinople.
FREDERICK GUARRACINO, Esq., formerly Her Britannic Majesty's Vice-Consul, Constantinople.
LUDWIG SECFELDER, Esq., Constantinople.
CHARLES LEMPRIERE, Esq., D.C.L., St. John's College, Oxford.
HENRY HAYMEN, Esq., Belmore Lodge, College-park, Lewisham.
SOLICITORS—Messrs. M'DIARMID and TEATHER, 5, Newman's-court, Cornhill, London, E.C.
AGENTS IN LIVERPOOL—Messrs. J. BRAMLEY MOORE and CO.

BANKERS.

London—THE IMPERIAL BANK (Limited), 6, Lothbury, E.C.
Constantinople—THE IMPERIAL OTTOMAN BANK.

The directors are now prepared to issue a further number of bonds to bearer, with coupons for the interest attached (part of £60,000 authorised to be issued), to provide a larger working capital, and for the purposes mentioned in Mr. Austin's report, the mines having been opened and proved to contain a large supply of ore. Bearing interest at the rate of 8 per cent. per annum, payable half-yearly on the 30th June and 31st December, the principal to be repayable in (note—from the 30th June, 1881) 10 years with 50 per cent. bonus, or £15 for each £10, the holder, however, to have the option after (note—from 30th June, 1881) three years of requiring payment of principal without bonus or deduction, at any time on six months' notice. All bonds of this issue will rank equally against the property of the company, irrespective of the date of issue.

Copy of the directors' report, &c., and forms of application for bonds, can be obtained from the secretary, 15 and 16, Railway Approach, London Bridge, S.E.

Since the issue of the directors' report the vein has been struck at two lower levels—viz., on the 10th of February. Mr. Austin reported:—

THE COAL FIELDS OF WESTERN CANADA—No. II.

Having thus briefly described the general mode of occurrence of the coal on this part of the Belly River, the following more detailed notes on the outcrops which occur will serve to show the actual character of the seam. At the Coal Banks the coal has been extracted chiefly by quarrying along the natural outcrop, though during the past summer a small level has been begun. The outcrop is situated in the front of a steep scarp bank facing the river, and the seam, which at the southern end of the bank is about 30 ft. above the water, dips away below the water at the northern. The section showing the mode of occurrence and association of the coal in the bank, but not extending upward to the base of the drift deposits, indicates that the main seam consists of coal 1 ft. 4 in., shaly parting (often almost absent) 4 in., coal 4 ft. = coal 5 ft. 4 in., below which is carbonaceous shale 2 ft. The dip at this place is about N. 83° W. (mag.), at an angle of 5° to 8°. On the opposite side of the river, at its next bend, the coal seam is again well shown. It is slightly undulating, and dips gradually away below the water level at the northern end of the bank. The part of the section designated above as the main seam is here coal 1 ft. 6 in., shaly parting (1 to 3 inches) 2 in., coal 3 ft. 3 in. = total coal 4 ft. 9 in. About 4 in. in thickness at the base of the seam is here laminated in texture, but appears nevertheless to be of good quality. The general dip is about N. 50° W. (mag.), at an angle of less than 5°. From this point for a distance of five miles down the valley, the dark shales overlying the coal are alone seen. When it again appears, on the west bank of the river, the main seam shows coal 1 ft. 6 in., shale 3 in., coal 4 ft. 6 in., shale 1 ft. 6 in., coal 2 ft. 9 in. = total coal 8 ft. 9 in. The lowest division of the seam at this place is apparently not represented in the sections previously described. The coal in it is somewhat laminated, but seems to be of good quality. The dip is here about S. 70° W. (mag.), at an angle of 5°.

About three miles further north, extensive exposures of the coal are again found in the scarp bank or cliff facing the river, at a height of about 100 ft. above the water level. The dip is light and undulating, but on the whole westward, or away from the river. The main seam is here—coal, 2 ft. 6 in.; carbonaceous shale, 7 in.; coal, 2 ft. 2 in.; carbonaceous shale, 1 ft.; coal, 1 ft. 3 in.; total coal, 5 ft. 11 in. The coal here appears to be of good quality throughout. North of this point on the river the main seam is not again found well exposed, though in several places the associated rocks are shown in such a way as to indicate that it outcrops below the drift a short distance east of the River valley. At the point at which the base of the Pierre should cross the Little Bow River, a seam of coal a few inches thick was observed by Mr. McConnell, but the exposures did not bring the main seam into view. This coal-bearing horizon appears again on the Bow River at Grassy Island, about 35 miles in a direct line below the Blackfoot Crossing, in lat. 50° 25' 15". In their general appearance, arrangement, and thickness, the seams here exposed closely correspond with those on the Belly River. The seams dip westward at a very light and constant angle. The seam 4 ft. 6 in. in thickness probably represents the main seam of the Belly River.

The coal is compact, does not easily break up by handling or exposure, and is in every respect a very excellent fuel, but does not yield a coherent coke. In correspondence with the increased distance from the mountains of the outcrop of the same seam on the Bow River, and probable inferior degree of alteration to which it has been subjected, the coal is there found to contain more water, approximating in this respect to some of the Souris River lignites. From these, however, it still differs in its more compact texture and resistance to weathering and the regular vertical cleat or jointage planes by which it is traversed, which cause it to assume cuboidal instead of conchoidal forms on fracture.

In his concluding general remarks on the coals and lignites, Dr. Dawson remarks that, whether from an economic or purely scientific point of view, one of the most interesting results of the exploration of the Bow and Belly River country is the determination of the fact that the coals are not confined to a single horizon or formation, but characterise at least four zones in the geological series of this region. The fuels found in the laramie represent, at least in a general way, those characterising the same formation of its representative, the Fort Union Group, eastward on the plains to the Souris River. As far north as the Athabasca and Peace Rivers, fuels are now known to occur in rocks of about the same age. The coal seam which has been referred to as attached to the summit of the Pierre shales, is not known to be represented elsewhere, unless indeed by a very thin seam near the same horizon on the Smoky River. The coal at the base of the Pierre, which has been worked at Coal Banks, on the Belly River, has not been recognised in a workable form beyond the limits of the district now described. The dark, highly carbonaceous beds at the base of the upper shales of Smoky River, are, however, at about this horizon, and in one place a thin seam of lignite coal is locally developed. A bed of lignite described by Prof. Cope on the Missouri as in some places of possible economic value must also be of nearly the same age. It is further worthy of remark that this coal-bearing horizon at the base of the

"Rich vein" struck at 77 ft. (see report, paragraph 10, page 4), sample thence sent home contains thick vein of gold, thus confirming report; 2½ tons dispatched."

A button of bullion forwarded from Souback as obtained from a sample of rich ore prove that such ore is of the value of about £6000 per ton.

And on the 17th of May, Mr. Austin reported:—

"Mr. Lemmi writes that he has struck rich ore in the second level I ordered to be driven in the side of the hill to cut Cosma's vein."

"We have now the satisfaction of knowing that it (the vein) extends 120 ft. below the first workings. He also says he is now stoping ore in No. 2 shaft, containing 618 ozs. auriferous silver per ton, and shall be able to send it when the Greek Easter holidays are over."

N.B.—The directors notify that they are about to call meetings of the shareholders to increase the share capital, and to provide for the repayment of the bonds, and it is intended to provide that bondholders shall have the option of converting their bonds into shares at par so long as any shares shall remain unallotted.

Pierre of the interior continental region is as nearly as possible equivalent to that at the base of the Chico Group, which yields the coals of Vancouver Island at Nanaimo and Comox.

The coal in the series below the Pierre on the Bow and Belly River may be taken in a general way as representing those which occur in the lower or Dunvegan sandstones of the Pine River, in the Peace River country. The occurrence of workable coal seams at several different horizons, and the proved continuity of some of them over great areas, guarantees an abundant supply of fuel in this district, a matter of great importance in a country where great areas are almost entirely destitute of wood. The quality of some of the fuels is such as to render them suitable for transport to a distance, and it is doubtless on this belt of coal-bearing rocks in the vicinity of the mountains that the railways of the north-west will depend chiefly for their supply. The quantity of coal already proved to exist is very great. The distances for which the outcrops of certain seams have been traced have been mentioned. Approximate estimates of the quantity of coal underlying a square mile of country in several localities have been made, with the following results.—Main seam, in vicinity of Coal Banks, Belly River: Coal underlying one square mile, 5,500,000 tons. Grassy Island, Bow River. (Continuation of Belly River main seam): Coal underlying one square mile, over 5,000,000 tons. Horseshoe Bend, Bow River: coal underlying one square mile, 4,900,000. And Blackfoot Crossing. Workable coal in seam as exposed on Bow River: underlying one square mile, 9,000,000 tons.

OLD SHEPHERDS.—From the report which appears in another page of the Journal it will be seen that the main or south lode has just been cut at the 54, and found to be 10 ft. wide. The manager has decided to cut through it again in another place so as to ascertain its value; but in the meantime from the evidence of those who have just inspected the mine this magnificent discovery will of itself yield an output sufficient to keep the new crusher in full work, and more than treble the present returns.

WHEAL CASTLE.—The water is in fork below the 10 fathom level. It is expected that within a few weeks two new parallel tin and copper lodes will be cut. Captain Boyns says there can be no two opinions on their proving as rich as the Wheal Castle lodes already proved. The building of the engine-house is rapidly progressing, carpenters' and smiths' shops almost completed, skip-road partly laid down, and all work throughout the mine progressing so as to get in working order by the time stated. From the foregoing it would appear that profitable returns are likely to commence before the 10 per cent. guaranteed dividend ceases.

LEAD ORES.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
May 25—Park	25	25	£ 3 10 0	Adam Eytton.
—Minera	72	72	8 10 0	ditto
—ditto	60	60	8 15 0	Walker, Parker, & Co.
—ditto	8	8	8 12 0	Nevill, Druce, and Co.
28—Bwlch United	10	10	10 1 6	Goodhart and Co.
29—Foxdale	100	100	9 0 6	Quirk, Barton, & Co.
31—Tankerville Great Consols:—				
Tankerville	30	30	—	Sheldon, Bush, and Co.
Fennerley	100	100	—	Walker, Parker, and Co.
Bog	50	50	—	ditto
—Frongoch	40	40	7 8 0	Nevill, Druce, and Co.

BLLENDE.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
May 25—Park	25	25	£ 3 12 6	Crown Zinc Company.
—Minera	109	109	4 1 0	Bagillt Company.
—ditto	108	108	4 1 0	John Lysaght.
—ditto	65	65	4 1 6	Villiers Spelter Co.
—ditto	60	60	4 3 6	ditto
—ditto	88	88	3 19 6	Crown Zinc Co.
—ditto	70	70	3 15 6	ditto
—ditto	26	26	3 12 0	Villiers Spelter Co.
—ditto	20	20	3 12 0	Vivian and Sons.
29—Cwmystawth	40	40	3 12 0	Goodhart and Co.
31—Tankerville Great Consols:—				
Tankerville	60	60	—	Vivian and Sons.
Bog	60	60	—	Villiers Spelter Co.

COAL MINES REGULATION ACT, 1872.

EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY.

DISTRICT UNDER THE CHARGE OF THOMAS WYNNE, Esq.,
H.M. INSPECTOR OF MINES.

NOTICE IS HEREBY GIVEN, that an EXAMINATION for MANAGERS' CERTIFICATES OF COMPETENCY, under the above-named Act, will be HELD on the 27th day of June next, and CANDIDATES INTENDING TO PRESENT THEMSELVES AT SUCH EXAMINATION must, on or before the 18th day of June, notify such intention to the Secretary of the Board of the above-mentioned District, from whom all information as to particulars can be obtained.

By order of the Board,

JOSEPH KNIGHT, Secretary.

Newcastle, Staffordshire, 28th May, 1883.

N.B.—Persons who do not reside within the District are equally eligible for examination with those who do.

FOREIGN MINES.

ALAMILLOS.—May 23: In the 2, driving east of San Martin's shaft, the lode has declined in value to $\frac{1}{2}$ ton per fathom. The lode in the 20, driving west of San Martin's shaft, is small, but is well defined; producing $\frac{1}{2}$ ton of ore per f. in the 60, driving east of San Felipe's shaft, there is a strong lode producing stones of ore. The lode in the 60, driving west of San Felipe's shaft, has a promising appearance; yielding 1 ton per fathom. In the 60, driving east of San Enrique's shaft the lode is unproductive. The lode in the 85, driving in the same direction, is better defined, and produced stones of lead in the past week. In the 30, driving east of Taylor's engine-shaft, the lode is of no value. The lode in the 30, driving west of Taylor's engine-shaft, has improved to $\frac{1}{2}$ ton of ore per fathom. The 80, driving east of San Victor's shaft, has improved in appearance, and contains spots of lead. In the 80, driving west of San Victor's shaft, good stopping ground is being opened up; worth 1 ton per fathom. In the 70, driving in the same direction, nothing of value has been intersected. The lode in Manuel's winze, sinking below the 115, is open, but contains no lead. In Bartolo's winze, sinking below the 10, there is a regular and compact lode; yielding 1 ton in a fathom. Luis's winze, sinking below the 70, is going through a very strong lode; worth 2 tons in a fathom.

ASIA MINOR.—J. W. H. Escherich, J. P. C. Manschied, May 15: Report for April: District 1.—Level 1 (Arthur): In driving south of the lode, and in rise No. 2, the work had to be stopped for a fortnight to secure better ventilation; total stoppings per fathom 3 tons.—Level 2 (Hamburg): Total stoppings per f. $\frac{1}{2}$ to 2 tons per fathom.—Level 3 (Petri): Total stoppings per fathom 3 tons.—Level 4 (Svalan): We continue to drive on the lode north, which has decreased; total stoppings in this level $\frac{1}{2}$ to 3 tons per fathom.—Level 5 (Durfeld): total stoppings $\frac{3}{4}$ tons per fathom.—Level 6 (Durfeld A): In the cross-cut the appearance of the lode has improved to $\frac{1}{2}$ tons per fathom; total stoppings 2 to $\frac{3}{4}$ tons per fathom.—Level 7 (Hadij Harous): total stoppings per fathom 2 to $\frac{3}{4}$ tons.—General Remarks: Production in April 138 $\frac{1}{2}$ tons, 21 working days, against 135 tons in 27 days in March. For the reasons mentioned in last report there has been a decrease of 48 hands in the number of miners; on the other hand we had to increase the surface hands by 58, of which 26 were employed at the dressing-floors, constructing lime-pits, &c., and 23 in constructing and repairing buildings. The production at the dressing-floors has increased this month, nevertheless the average has not yet come up to the quantity we anticipate being produced.

CALIFORNIA GOLD.—The usual weekly report has not yet been received, having been delayed in transmission. Mr. Alfred Rickard, the manager at the mine, cabled the directors on the 26th inst., as follows:—"Mill run (39th week), 213 tons; yield, \$3400 (6807); smelting ore sales, \$850 (1704)."

CALLAO BIS GOLD.—Mr. G. Volckmer, who has been associated with the El Callao Company from its commencement, has accepted the appointment of local manager to this company. The latest advices from the mines are as under:—April 7: No. 3 shaft has been sunk since last report 11 ft.; total depth from surface to-day, 128 fms. We struck bluestone at 124 ft. We have crossed several small branches of quartz, and are all running north and south. Some of the stones have a lot of sulphurets in them. This shaft has been timbered from top to bottom, and divided and cased since last report.

—April 14: No. 3 shaft has been sunk 3 or 4 ft. more, and the bottom of the shaft is looking very promising, with leaders running north and south. At this point we have cut a spring of water. We are now engaged in putting down a pump in this shaft.

CANADIAN COPPER.—Francis Bennetts, May 13: Harford Mine, No. 5 Shaft: In the 70 east, two leading branches of ore, amounting to about 10 in. of solid ore. In the 40, resumed, there is a leader of about 10 in. of good ore, 6 per cent. In the 10 east the vein is of mixed ore and slates for about 3 ft. ore.—No. 2 Shaft: The vein in the 10 east contains a leader of ores of about 1 ft. wide.—No. 1 Shaft: The vein in the 35 west is about 3 ft. wide, with a gold leader of ores of 12 in. to 14 in. wide. The stopes throughout the mine are looking well, the average width of the vein being 4 ft. to 6 ft. 6 in.—St. Francis Mine: The vein in the 30, south of main shaft, is about 2 ft. 6 in. wide, and looks very promising. The smelting works are running well.

CORPORATION OF SOUTH AUSTRALIAN COPPER.—Capt. Bryant, April 23: Barrary for driving; but I deem the characteristics are more favourable, the rock being less stratified, and has changed into a compact bed rock. Whether owing to a dyke forming between the mudstone recently driven through, and the more intrusive rock, we are not in a position to determine until further opened up.—60 fm. Level South: Agreeable to our proposed plan of opening up the mine, we have reached the footwall, and for permanent development shall carry a portion of it. The western side of level is of much the character as in the level driven in the lode—say, 2 to 3 tons 22 per cent. ore per cubic fathom.—60 fm. Level North: Stopping the piece of ground to form level below the old 60. The lode is worth about 3 tons 22 per cent. ore per cubic fathom. Owing to the accumulation of stuff, we have commenced blasting out the side of the old 60 for another stop.—Saltia Well: We have fixed cistern pumps, and are making preparations for fixing engine, bob, and rods. The excavations necessary for laying pipes are well on towards. The machinery is in fair working order. Owing to the scarcity of feed, the teamsters are not able to take a large quantity of ore to Parachina, consequently the ore is accumulating on the mines.

DEVALA MOYAR GOLD.—Manager, May 7: I am happy to inform you that all our men have fairly recovered and are at work. I note your instruction as to the sanitary condition of the houses and lines. The drains and rubbish around the European quarters and the coolie lines have been cleared out, and I have been overhauling the roofs and putting new ones on. I was obliged to stop the shaft on Tuesday until the pumps shall arrive, although the drainage would scarcely involve an hour's pumping per day, it has become too much for the coolies to draw the water up 110 ft. Massey and Co. telegraphed me on the 2nd inst. that the pump was being leaving. We are now crushing the quartz we have taken out and intend to clean-up to-morrow.

FORUNA.—May 23: Canada Inco Mine: In the 70, driving west of San Pedro shaft, the lode is compact, and has improved in value to $\frac{3}{4}$ ton per fathom, but the ground is hard. The lode in the 80, driving in the same direction, has increased in size, and is thickly impregnated with lead ore, worth $\frac{1}{2}$ ton in a fathom. In the 90, driving west of San Pedro's shaft, there is a wide and strong lode, containing spots of ore, but not enough to attach a value to. The lode in the 120, driving east of Taylor's engine-shaft, is small and unproductive and the ground is hard. In the 100, driving east of Lowndes shaft, splendid ore ground is being laid open, yielding $\frac{3}{4}$ tons in a fathom. Minton's winze, sinking below the 90, looks more promising, and will doubtless shortly improve; its present worth being $\frac{1}{2}$ ton per fathom.—Los Salidos Mine: The lode in the 175, driving west of Taylor's engine-shaft, is larger and better defined, and yields good lumps of ore, valued at $\frac{1}{2}$ ton per fathom. The 175, driving east of Taylor's engine-shaft being in close proximity to the cross course the lode and ground have become disordered. The lode in the 180, driving in the same direction, presents an improved appearance, and looks promising, yielding $\frac{1}{2}$ ton in a f. In the 145, driving east of Taylor's engine-shaft, splendid ore has been broken during the past fortnight, but it is not so good; at present producing $\frac{1}{2}$ ton per fathom. The 130, driving east of Taylor's engine-shaft, has improved to $\frac{1}{2}$ ton per fathom. The lode in the 120, driving east of San Pablo's shaft, yields occasional spots of ore, but not enough to value. In San Miguel's shaft, sinking below the 110, good progress is being made, although the ground is hard. Virginia's winze, sinking below the 145, is situated in advance of the 160, east of Taylor's engine-shaft, and the lode is worth 1 ton per fathom.—San Antonio Mine: The lode in the 65, driving east of Henty's engine-shaft, has improved of late to 1 ton per fathom, and is of a very promising appearance. In the 65, driving west of Henty's engine-shaft, the lode is small, and the ground rather hard. The lode in the 55, driving in the same direction, is large, containing quartz and stones of lead ore, worth $\frac{1}{2}$ ton in a f. In the 45, driving west of Henty's engine-shaft, there is a large lode opening up good stopping ground that yields 1 ton of ore in a fathom.—San Francisco Mine: In the 40, driving east of San Francisco engine-shaft, as yet we have not met with anything of value in the cross-cut south. The lode in the 40, driving west of San Francisco engine-shaft, is regular, and shows spots of lead ore occasionally.

ROHNOR AND DONALDSON CONSOLIDATED.—Mr. Alfred Rickard, in his report for the week ending May 5, says respecting the Donaldson Mine:—"The No. 2 stopes are yielding 2 $\frac{1}{2}$ tons of milling and $\frac{1}{2}$ ton of smelting ore per fathom; the stopes have been re-set on tribute, at a remittance of 30 per cent. on net proceeds of output. The intermediate level is yielding $\frac{1}{2}$ ton of smelting and 1 ton of milling ore per fathom; preparatory work is in hand for stopping on tribute at a remittance of 30 per cent. on net proceeds of output. The No. 3 south stopes are yielding 2 tons of smelting and $\frac{1}{2}$ ton of milling ore per f.; the stopes have been let on tribute at a remittance of 30 per cent. on net proceeds of output—the lode maintains its value. The lode in the No. 4 stopes is 4 ft. wide; although mostly of low grade it yields good grade top quartz, in small veins from 4 in. to 5 in. wide. In the Champion Mine the 200 west stopes are yielding 5 tons of fair grade milling ore per f., and a little smelting ore, and have been let on tribute at 25 per cent. on net proceeds of output. In the 40 east the ground in back of old stopes has been let on tribute at 25 per cent. remittance. In the 320 west the shaft having been completed to the bottom, six miners were placed to drift on the lode, which is 5 ft. wide, yielding 3 tons of milling and 1 ton of smelting ore per fathom. The lode in the rise of the 520 east is improving, giving promise of opening out tribute ground. Satisfactory progress is being made with the shaft. Work has been resumed at the K and D mill, in view of getting the buildings ready for the machinery in good time.

—The resident director wrote under date of May 14:—"The building of our new mill will be completed by the end of this month. Work is progressing regularly."

LINARES.—May 23: Pozo Ancho Mine: The lode in the 130, driving east of Warner's engine-shaft, in improving in appearance, and yielding good stones of ore; worth $\frac{1}{2}$ ton per fathom. The 130, driving west of Warner's engine-shaft, has declined to $\frac{1}{2}$ ton per fathom during the past week. In the 115, driving in the same direction, there is a large lode, consisting chiefly of carbonate of lime, and yielding good stones of ore, valued at 1 ton per fathom. The lode in the 115, driving west of Pell's engine-shaft, is very open, but not so productive as it was, its present worth being $\frac{1}{2}$ ton per fathom. In the 135, driving east of Pell's engine-shaft, the lode is rather small at present, yielding $\frac{1}{2}$ ton per f., and the ground is hard for driving. The 105, driving east of San Francisco shaft, is opening up moderately productive ground; worth 1 ton of ore per f. The lode in No. 249 winze sinking below the 115 has declined in value to $\frac{1}{2}$ ton per fathom. In No. 250 winze sinking below the 115 there is a strong and productive lode, yielding 2 tons of ore per fathom. The lode in No. 251 winze sinking below the 120 is small, consisting of quartz and lead ore, valued at 1 ton per fathom.—Quintanilla Mine: In the 115, driving south of Taylor's engine-shaft, good progress is being made considering the hardness of the granite. The lode in the 100, driving east of Taylor's engine-shaft, is large and strong, yielding occasional stones of ore. The 90, driving in the same direction, is opening up a good length of paying ground at a very cheap rate, its present worth being 1 ton of ore per fathom. The lode in the 65, driving east of Judd's shaft, continues small, producing $\frac{1}{2}$ ton per fathom. In the 70, driving east of San Francisco engine-shaft, the lode is disarranged, and less productive than it was, yielding 1 ton of ore per fathom. The lode in the 70 (No. 2 lode), driving in the same direction, is small and poor.

NERBUDDA COAL AND IRON.—J. A. Maughan, Monthly Progress Report for April: In handing you my monthly progress report for the month of April I am obliged to make it somewhat brief for the want of matter, for the work at the moment is of such a nature that with having already reported each week in my letters what is doing, there is little left to say.—Output: I am happy to be able to report a satisfactory increase in the output for the month of April;

though we have not quite reached the 2000 tons, we have still reached the highest output attained for some years. The output for the month of April amounts to a total of 1978 tons 19 cwt. 0 qr. 13 lbs., of which the sales were 1688 tons 3 cwt. 2 qrs. 23 lbs., and the colliery consumption 290 tons 15 cwt. 2 qrs.—No. 2 Shaft Workings, No. 2 Seam, Chargaum District: This district continues to look well, and to yield the greater part of our output; there are six faces about half way through squares P 31, 32, 33, and 34 going eastwards, and these are the most advanced places, the rest of the east faces being pretty much in a line between squares P 24 and P 39. The south faces in this district extend well into square P 35. To the north I am putting a place through the dyke in square Q 31. I can make places for 34 men per shift in this district, that is 102 hewers in the 24 hours.—South Level: I still can place seven men a shift in this district; but, as already reported, it will soon merge into Chargaum district. The leading places south are still in P 39, and are showing signs of reaching the dyke called on the plan supposed edge of basin.—No. 2 Boring: The top of the pipes were reached by the staple at 53 ft. on April, and operations commenced to draw the pipes, and get at the rock.—No. 5 Boring: This boring on April 30 reached a depth of 358 ft. 4 in., making a depth 20 ft. 10 in. bored during the month, and the strata still being hard red conglomerate.—Engines and Machinery: The Agnes winding-engine has been working well during the month, but an accident happened by the bursting of the cast-iron pump casing owing to a flaw in the metal. The Georgia engine-pump has been substituted for it in the meantime, and another has been ordered from Bombay. All other engines and machinery going on well, but the 20-h.p. engine (Robey) is much in want of the brasses ordered for it, and ropes and sheaves are urgently required for incline haul.—Workmen: The fittings have been engaged chiefly during the month repairing hand-pumps and lowering them further into the workings; repairing Helen pit Robey; taking Georgia cylinder and pump to Agnes engine, and fitting it there; repairing and looking after donkey engine and other pumps. The blacksmiths have been engaged coupling chains, flanges for pipes, sharpening boring and other tools, making and repairing iron work of coal tubs, &c. The carpenters have been chiefly engaged in repairing tanks, making roofs for new lamp room, making buntons and scaffolding for Helen pit, making cribs for Helen pit, re-roofing and repairing bungalows. The masons have been building new lamp cabin at mouth of Agnes drift, walling at Helen pit, and repairing bungalows. The coolies, too, have been assisting fitters, masons, and joiners. Helen pit, mixing lime, carrying stones and bricks, and also at bungalows and other building repairs.

NEW CALLAO.—J. A. Skerchey, May 2: Since my arrival I have been busily engaged in making all necessary arrangements for the transport of the machinery for the mill and shaft. I found the Robotham shaft in good order and perfectly sound with but some 50 ft. of water in it, which can soon be drained when the pumps are erected. We are daily expecting the arrival of the vessel containing our machinery, and as the river now rises very rapidly we anticipate but little delay in unloading our heavy machinery. We are on the point of establishing a regular postal service between our mine and Bolivar, so as to ensure a reply to all letters by the same steamer that brings them. This will put our mine a fortnight nearer than any other in the country.

NEW EMMA.—George Collins, May 7: The shaft is now 21 ft. below station, having made but 2 ft. since report of 3 th ult., owing to breaking of sinking-pump, which is now repaired, and working all right again. The cross-cut is in the foot of station, having made 14 ft. since report of 30th ult. No change in rock. Slight increase in water.

NEW QUEBRADA.—Report for March: Dispatched to the coast for shipment: Regular run smelting-works, 16 tons, 28'52 per cent. dry; ore from the mines, 2884 tons, 9'94 per cent. dry; total, 2890 tons. Forwarded from mines to smelting works, 1094 tons, 5'01 per cent. dry: Home arrivals, 2233 tons; sales of ore, 107; quantity afloat on March 31, 5299 tons; stock at the mines on March 31, 2710 tons; stock of ore and regular on wharf at Tucuman on March 31, 5268 tons.

ORGANOS GOLD.—J. J. Green, April 5: Crushing was commenced with 13 heavy stamps in March, and the quartz crushed when cleaned up was 50 tons, resulting in 57 cwt. of melted gold. Mr. Green would have preferred turning more stuff through before cleaning up, but that was impossible, cash having to be provided to keep going, while the stoppages for repairs during the run were of frequent recurrence. Piece by piece nearly all the wearing parts have been replaced by new steel ones forged at the mine, work early and late has been bestowed upon them to effect a good light job. Mr. Green also states we start two batteries (20 heads) again to-morrow. The third battery will go to work in a few days with a sheet iron rivetted coffer. It is intended also to fit the battery a coffer perforated grate. The fourth battery cannot be put to work until the coffer plates are received. The two principal stopes—the Esperanza and Buenaventura are in a good paying lode, assaying variously from 1 to 3 and 4 ozs. per ton. That in the back of Buenaventura is a very valuable section of ground, and is nearly intact. The total amount of quartz crushed to date is 110 tons, yielding 152 ozs. of gold, or at the rate of 1 oz. 3 dwt. (nearly) per ton, a result equal to Frontino, and superior to St. John del Rey.

PESTARENA UNITED.—Samuel Gifford, May 22: Val Topa; The No. 1 level end on new lode has a somewhat payable ore, with the pyrites in large lumps of crystals, and the quartz is somewhat improved. The bed of quartz lately developed on the east side of the new lode in No. 1 level contains good thickness, and is now yielding 15 tons per fathom, at 7 dwt. per ton. The drift above this on the new lode also shows a larger width of ore, but it is of lower grade, the yield being 10 tons per fathom, at 5 dwt. per ton. There is little doubt now as to the quartz bed below extending into this. The No. 2 level is wholly in sterile schist along a wall-like division. Trials made in the old workings on great quartz lode at intermediate of No. 2 level have developed small quantities of low class payable ore.—Pestarena; The 130 east on No. 1 lode north has a large lode of last few days (by the washers) on account of whilst the south end is in favourable rock with a small vein of ore, worth 2 tons per fathom, at 15 dwt. per ton. The 120 east north has a mixed lode of quartz and schist, yielding 3 tons per fathom, at 13 dwt. per ton. The 33 east north on No. 5 lode has a good width of quartz of low grade, but promising to improve, now worth 6 tons per fathom, at 8 dwt. per ton. The 55 south has a small compact vein of ore in more congeal rock, worth 2 tons per fathom, at 1 oz. per ton. A little ore is being saved from a vein of schist on the 65 east on the 65 east and south. The 30 and north is somewhat improved, having semi-decomposed quartz, with pyrites, yielding 6 tons per fathom, at 1 oz. per ton. The same level south is now getting into a little quartz, yielding ore occasionally. The lode in the 90 and north is contracting, and yields 3 tons only per fathom, at 14 dwt. per ton, while the south end is still in sterile ground; but it begins to have a more congeal appearance. The small vein of arsenical pyrites lately seen at Pozo continues, but the ground remains too hard for it to expand much. The machinery is in good condition.

RICHES REEF GOLD.—Manager, May 7: We are pushing on No. 1 tunnel as fast as possible; it will test the depth considerably below any of the native workings. We are now in a position to continue Nos. 3 and 4 tunnels, as the coolies are returning to work. No. 3 will strike the line of the reef 200 ft. below the surface, and No. 4 300 ft.

RICHMOND CONSOLIDATED.—Telegram, May 22: Week's run (one furnace), \$15,000, from 285 tons of ore; refinery, \$20,000.—S. Longley, May 7: The 100 south drift from station has been run 12 ft. Total 353 ft. In old ore chamber. The 300 south-west drift from station has been run 16 ft. Total 478 ft. In limestone. The 300 south-west drift from south-east has been run 16 ft. Total 180 ft. In limestone. The 1050 north-west drift from station has been extended 13 ft. Total 670 ft. In limestone. The 1050 north-east drift from north-west drift has been extended 15 ft. Total 323 ft. In limestone.

RIO GRANDE DO SUL (BRAZIL) GOLD.—H. Eddy, April 14: Aurora Lode, Western Shaft: The men having completed shooting down the side for plot and convenient room at the bottom have just commenced driving east and west on the lode, in which there is no change since last week's report. This latter remark also applies to No. 2 shaft. No. 1 gallery west of the lode is gradually improving in size, the quality being materially the same. No. 2 north-east on counter is also without material change. In No. 2 north-west cross-cut on slide the ground is fairly good for driving. We shall increase the force here, as well as in No. 1 west, after the end of the present month so as to make greater progress in both directions in the porphyritic granite.—Scribner Mine: We have more water here than I expected, but I hope to be enabled to report on the bottom of workings that we are clearing up next week.—Ligon: Very little has been done during the last few days (by the washers) on account of the river having been much swollen by the late rain, so that I have no further statistics than furnished in my last report.—Reduction Works: We are proceeding regularly with the reduction of the stuff from the counter, which (from quantity of amalgam) will about equal the value obtained by assay—5 to 6 dwt. of gold per ton. I have employed masons and carpenters to build good winter quarters for Europeans at the mine, and hope to report progress next week.

RUBY AND DUNDEBERG CONSOLIDATED.—May 6: Dundeburg: There has been no work done in this mine this week on the company's account. There are 18 tributes on the lode, who are extracting about the usual quantity of ore. Have shipped 28 tons of tribute ore this week.—Home Ticket: The machinery is working very satisfactory. We have cleared out all the waste material which had accumulated while making the upraise for the new shaft. Work was commenced on the ore to-day (Monday). Have shipped 34 tons ore this week, and 17 men at work.

—Telegram, May 23: 148 tons ore shipped; 95 tons smelted, realising net \$2100; 16 tons tribute ore shipped and 6 tons smelted, producing to company \$29.

ST. JOHN DEL REY.—Telegram from Morro Velho, dated Rio de Janeiro, May 23: Produce 10 days (second division of May), 5250 dwt.; value, 2034 dols.; yield, 2'70 pts. per ton.

UNITED MEXICAN.—Advices from Mr. Hav, dated Guanajuato, April 28: Mine of San Cayetano de la Ovejera: In the end of the frente de San Juan west (pintas) appearances of ore have appeared in the lode to the bajo on a width of 35 centimetres, and to the alto on a width of 30 centimetres. The cross-cut we have driven as advised has shown that the lode is 2-60 metres wide; yesterday we have begun to drive the cross-cut from the end of the lode to the alto of the lode at that point. In the frente No. 2 of Santa Rosa west the lode has a width of 1'20 metres, and here also we begin to find appearances of ore. In the frente de San Vincente west the end having holed the contraciolo de San Juan the work ceased. In the contraciolo de San Vincente during the week 19 cargass of ore have been remitted to Duran; the width of the ore is only 55 centimetres. In the frente No. 1 of San Andres east the ore has given out, but from what was thrown down in the beginning of the week 4 cargass have been remitted to Duran. In the frente No. 2 of San Andres west, though the ore is a little ramified, it shows a better class than hitherto; from this end we have remitted to Duran 5 cargass. In the frente No. 3 of San Andres west the working is improving, the present width of the ore being 65 centimetres, but only 2 $\frac{1}{2}$ cargass of a fair class have been sent to Duran this week. From the pozos No. 1 of San Andres we have extracted this week 17 $\frac{1}{2}$ cargass of fair ore sent to Duran. In the pozos No. 2 of San Andres the ore continues to be of a very good class on a breadth of 80 centimetres, and has yielded this week 30 $\frac{1}{2}$ cargass. The slope to the contraciolo de San Andres has given 4 cargass of good ore this week. Of ordinary ore from the workings we have remitted to Duran this week 121 $\frac{1}{2}$ cargass, making a total extraction of 2 4 cargass of hacienda ore. Returns from the mine of San Cayetano de la Ovejera for one week to April 21, \$3911. Outlay for same period not forwarded.—Adit of San Cayetano: We have abandoned the frente de San Patricio, but we have begun a new frente called San M-rin at 199 metres from the mouth of the adit on a natural vein 45 centimetres broad about No. 30 west. There are some favourable appearances that led T. W. Rocha to prefer this working to that of San Patricio.

WEST CALLAO GOLD.—J. A. Skerchey, May 2: Mr. Smith, after having been one of the concession, has made himself acquainted with the exist-

ence of all the lodes I mentioned in my report, and has met with an outcrop of one, probably the Pinell lode, 10 ft. thick. As no lode has yet been discovered in this country which does not carry gold, I think our shareholders need not labour under any apprehension as to the value of their property. We are now in daily expectation of the arrival of the vessel with our machinery, and are making preparations for its immediate transport to the mine. The weather and roads are in a satisfactory state for the conveyance of the heavy portion of the plant, and as the heavy rains do not set in till July we hope to have everything up on the mine by that time.

—Mr. Winwood Smith, April 30: I am telegraphing you to-day that the property having been fully and legally conveyed to the company and the title being perfectly clear and satisfactory, to-morrow morning, 2 A.M., I start for the mine, and Mr. Skerchey will forward you an English translation of the transfer. With regard to the mine I have much pleasure in fully confirming Mr. Skerchey's report. The lodes of quartz are even more numerous than stated, and I have seen one outcrop of over 10 ft. in width, which I believe to be the Pinell lode. Timber is abundant and of the best quality, and the situation appears healthy. I have been clearing the bush for the dam, and have now sent up 12 men, six of whom are miners, and will at once proceed sinking the Pinell shaft, which is situated about 300 ft. from the spot I have chosen for the mills. The other six will be employed in laying foundations of and preparing the timber for the mills. Preparations are being made for transporting everything to the mines as quickly as possible. I have heard from the agent of Messrs. Fraser and Chalmers that the Frue Vanner ore concentrator has already left New York.

TOLIMA MINING COMPANY.—Advices received by the mail of May 26, of which the following is an abstract:—

Friars March returns	\$28,342'64
" " cost	22,612'74
Estimated profit	\$ 5,729'7

Equal in sterling to 9544. 13s. 7d.	
The underground agent reports	Fms. Ft. In.
of ground expended, of which	39 6 7
was productive, leaving	27 4 1
of unproductive ground	12 2 6

The superintendent whilst explaining that the loss of a week at Easter, the want of water-power during the month (since supplied by copious rains), and a slight deficiency of labour, have tended to induce the diminution apparent in the returns, reviews the general position of the mine in the following favourable terms:—"The principal features to note this month are an improvement in the vein in engine-shaft, more favourable indications for ores making their appearance, a better yield of ore in the 70 fm. east.

The underground agent reports:—**ENGINE-SHAFT.**—This was deepened during the month 6 ft. 8 in.; total depth at date under 70 fm. brace, 57'2 ft. The vein bottom of the shaft is now 9 ft. wide, principally composed of light grey kilaas and quartz well charged with iron pyrites, and occasionally showing spots and lead and blende ores, but not of saving value. A variation is taking place in the underlay of the lode, the angle of its dip being several degrees nearer verticality than was the case in the upper portion of this, and throughout the preceding draft. A considerable deposition of lode material also occurs under the footwall at the present bottom, presenting the appearance of a branch coming in from the south and uniting with the lode at this point.

The appearances of the whole are of an encouraging character, and lead to the expectation of increased productiveness with deeper sinking. Pumping gear and pitwork generally in good order and working satisfactorily.

THE 70 FM. LEVEL EAST END advanced 12'2 ft. As anticipated in last report a further improvement has taken place in this end, the vein being full worth 30 cwt. per fathom, and daily assuming more of the features which characterize the lode in the No. 2 (60) east winze, which the drirage has now approached within 5 fms.

THE 70 FM. EAST STOPE.—The vein has slightly improved in the high bank, the mineral being freer of gangue and concentrated in a compact and regular leader averaging about 10 in. wide. This run of ore ground will probably hold up without interruption to the sole of the 60 fms. workings, where the lode is similarly productive.

THE 70 FM. NO. 1 EAST WINZE.—This is struck off in the country rock north of the main lode, and will be sunk vertically until meeting with the footwall of the same, which it will probably reach in 2 $\frac{1}{2}$ to 3 fms. working. The winze will in course of sinking traverse the pipe of ore ground (which dips east) gone under the 70 between it and the engine-shaft, and on communication with the 80 will divide same into convenient stopping sections.

CROSS-CUT NORTH OF 70 EAST driven last month 3'5 ft., and cross-cut south of 70 west extended 4'6 ft., relet to two men at \$120 per fathom. No change of note has occurred in either; in both the ground is hard and unfavourable for speedy progress, though not of an uncongenial description for productive veins.

60 EAST STOPES.—Nos. 1 and 2 have reached the upper margin of the shoot of ore and are suspended. No. 3, by four men, produces 45 cwt. mineral per fathom; ground wrought 53 ft. No. 5 slope, by 10 men, worth 65 cwt. per fathom of mineral, estimated to produce 250 cwt. fine silver per ton. Ground expended 35'4 ft.

NO. 2 EAST WINZE.—Total depth below 60 brace 61 ft. This winze is now down the required depth and driving westward has commenced, to meet the 70 east end. The vein continues throughout the sinking of this winze remarkably rich and powerful, and goes down in sole without material change in character or productiveness. We have a good prospect at this and deeper levels on the course of this pipe of mineral of extensive and rich sections for stopping.

NO. 2 EAST RISE.—This is on the south vein, and worth 12 to 15 cwt. per fathom; risen 5'7 ft.

60 WEST RISE NO. 2.—This is being put up in back of 60 west, some 35 fms. from shaft against the 50 west winze. The vein is chiefly composed of tough flookan and kilaas with a mixture of low grade pyrites.

50 FM. LEVEL.—Cross-cut south of Esperanza shaft, by two men, at \$90 per fathom, traverses ground thickly interspersed with strings of quartz, evidently droppers from the lode on which the above shaft is sunk.

51 EAST WINZE NO. 3.—We are cutting brace for this, with two men, at \$40 per cubic per fathom. The winze will be sunk in line with Esperanza shaft for the more immediate object of communicating with the 60 east, the ventilation of which, already very defective, will, otherwise, be still more so, and for the remoter and less important object of forming a continuation of the Esperanza shaft, which, in the future, will, doubtless, be a convenient base of operations as the eastern sections are developed by the deeper levels.

SLOPE in side of drift west of Modesto's winze has been worked as close down to the back of the 50 as for the present is prudent. An arch is, therefore, left in the sole of ends to support the pillar or horse of ground standing between this and the northern workings.

50 WEST, NO. 2 WINZE.—Present depth below brace in 50'24 ft. The lode is 4 to 5 ft. wide, consisting principally of tough schist and a leader of flookan on the hanging wall, charged with a mixture of pyrites and occasional spots of lead and blende ores, but not of commercial value.

40 EAST.—Stope on south lode continues without variation, worth 10 cwt. of 180 ozs. ore per fathom.

40 WEST.—Rise extended 10 ft., but neither it or 40 west rise present alterations for remark.

30 EAST.—The vein has become more compact, but continues to present encouraging indications for improvement.

20 SOUTH-WEST END. has further improved, the leaders of mineral being 1 $\frac{1}{2}$ to 2 in. wide, fairly solid, and of good grade. The sole of the drirage has been more or less mineralised for several fathoms in rear of the end, the ore rising over the face of the forebrace at the end advanced, and extending to the roof, showing a rather flat easterly dip in common with that of other shoots of mineral in the mine; this, with the general indication presented, gives grounds for the opinion that we are touching the margin of a run of ore ground. The end, at present, bears a value of 6 to 8 cwt. per fathom.

SABANDIA MINE.—During the month the men have been principally employed squaring down the shaft and generally preparing it for receiving skipway. This is now near completion; and in a few shifts will be in working order when plat will be cut and levels started east and west on the course of the vein. The greater facilities afforded by the winding appliances for drawing the stuff, with the important advantage of the additional supply of water lately brought to the wheel, will considerably expedite the progress of future operations here.

METALLURGICAL AND MECHANICAL INSTRUCTION AT KING'S COLLEGE.—The great facilities offered for acquiring sound technical knowledge at King's College have already been referred to in the *Mining Journal*, and it cannot be doubted that by placing the admirable metal testing appliances under the control of Professor A. K. Huntington those attending the metallurgical courses will have increased facilities for perfecting their studies of the nature and properties of metals. The testing plant includes a machine of the Kirkaldy type, made by Messrs. Greenwood and Batley, of Leeds, and which was presented to the College by the Clothworker's guild; it is capable of exerting a strain of 50,000 lbs. There is also a good torsion—Thurston automatic recording—machine, made by Messrs. W. H. Bailey and Co., of Manchester. These machines are supplemented by a good collection of tools and apparatus for the students in metallurgy and engineering, comprising a variety of cupolas for foundry work, workshops containing a large number of lathes, shaping, drilling, and other machines driven by steam-power, a spacious pattern or carpenter's shop, and various other necessary appliances, so that there is no reason why a student attentively studying for a few terms should not obtain at least as good an insight into the science and practice of the trades they study as could be had in metallurgical and engineering works carrying on business in the ordinary course of commerce. The Evening Classes which form an important branch of the King's College technical course are already well attended, and it is not doubted that the enlarged plant now available will prove a still further attraction. The first award of the Siemens' gold medal and prize will be made at the end of the present month, and will depend partly on an essay on some particular subject, partly on a written examination on the metallurgical lectures, and partly on actual work done in the laboratory. The subject for the essay for the present year is the "Manufacture of steel suitable for ship and boiler plates." The essays are to be illustrated by freehand sketches and mechanical drawings to scale, and must be sent in to Professor Huntington on or before June 30. The result of the competition will be duly recorded.

WATSON BROTHERS' MINING CIRCULAR

WATSON BROTHERS,
MINERS STOCK AND SHARE DEALERS &
1, ST MICHAEL'S ALLEY, CORNHILL, LONDON.

Nearly twenty years ago the mining information which had previously been published for a great number of years in WATSON BROTHERS Mining Circular was transferred to the columns of the *Mining Journal*, with the following announcement.

The chief attraction of a mine meeting in Cornwall is a goop dinner. Figures and accounts to many are a bore; printed statements of accounts are handed round, and too often by many taken as matters of fact, and scarcely any examination is made into anything in the way of charges, payments, and transfers. At any rate, this is how it used to be years ago, and from what has happened at Dolcoath, the same carelessness seems to be exhibited now, and then shareholders, whose duty it is to look after their own affairs in a Cost-book mine, grumble and growl when anything goes wrong. If they delegate their powers to a committee, that committee should see that things are properly conducted monthly, and then submit a full statement of affairs to the shareholders at the periodical and ordinary meetings. In Cost-book mines managed in London, the committeemen always meet monthly to audit accounts, &c.

We are sorry there is a delay in the sketch of the Caradon district. South Caradon, it is well known, paid over 384,000*l.* in dividends; West Caradon paid over 150,000*l.*, some years paying 10,000*l.* a year. East Caradon also paid large dividends, and shares rose from 1*s.* 6*d.* to 60*s.* At present South Caradon is in a limited company of 50,000 shares of 1*l.* each; West Caradon in 12,000*l.* shares, 7*s.* 9*d.* paid, and nearly paying cost; New West Caradon in 12,000; West Gonamena, 12,000. To the south of South Caradon, adjoining it and West Caradon, and taking some of the lodes of the former, is "THE NEW CARADON," in 12,000 shares, 5*s.* paid, and having 1600*l.* in hand. This sett is surrounded also by the new ground just commenced by the old South Caradon Company, and offers one of the best specs., in a small way, that we know of at present.

The Wheal Crebor ore sampled last week (398 tons) is estimated to produce 1483*l.* 15*s.* 6*d.* The best parcel (80 tons) assays 9½ per cent.; 62 tons, 8½; the average produce is 7 per cent. The average of the last sale was 7½.

We have carried on and are still holders of nearly 4000 shares in D'Eresby Mountain, and stated at the meeting we were prepared to take up 1000 shares, as our proportion of the unissued shares. Large numbers have already been applied for by shareholders, as well as by outsiders. None will be allotted until after the 15th.

Market value does not always represent the real value of a speculation.

The unissued shares in Langford are to be paid 2*s.* 6*d.* on application, 2*s.* 6*d.* on allotment, and 5*s.* in three months. Before the latter time we should hope to see shares at double present price. The copper in the lode is of very high produce—over 20 per cent.—and a few tons per fathom would soon pay cost. This is the lode that will form a junction with the Silver lode in the shaft. The shares on the terms above named will only be offered to present shareholders in the first instance; but if all are not taken we shall be happy to secure a few for any applicants, though we cannot, of course, promise them.

East Pool commenced working about the year 1833, and the original outlay by the shareholders was 640*l.* on 128 shares. As a copper mine it paid early and large dividends. The ores are rich beyond the average. The mine is now one of the richest tin mines in Cornwall. South Frances commenced as a copper mine in 1834, and the original outlay was 2232*l.* on 124 shares. It paid very large dividends as a copper mine, has also paid good dividends for tin, and may do so again before long. About 20 fms. from surface, soon after the company commenced operations, several pieces of oak timber were found in a good state of preservation, having laid there for upwards of a century. The mine, therefore, had evidently been opened by the ancient miners, probably for tin, shallow.

The lode in the 102 west at Prince of Wales is worth 15*l.* per fathom for tin, with very rich stones of copper ore.

At D'Eresby Mountain the lode on the hanging side at No. 6 continues worth 2½ tons of lead ore per fathom. The slope in bottom of No. 5 is improving.

At East Blue Hills the sale of tin for the four weeks is 259*l.* 12*s.*, which leaves about 80*l.* profit.

Capt. Daw, the manager of Bratsberg, considers that even with copper at the present price there will be no difficulty in maintaining the present rate of dividend. And further that when the new machinery is at work, about September or October next, the returns will be largely increased. Besides Bratsberg, the company have other mines, which may be, hereafter, either worked or sold for the benefit of the company. We can only account for the low price of the shares by the general dullness of the market.

The heavy expenditure at Langford has been for machinery and plant, which has all been charged for in the accounts. At present the monthly costs are under 200*l.* and we are daily, as we said before, looking for a discovery in the 50 end and in the shaft; in both places there is at present very rich ore. The issue of the shares, our correspondent may observe, will give the company a working capital of 2661*l.* And this they ought to have.

We hope to have something to say in regard to Parys next week.

INSTITUTION OF CIVIL ENGINEERS.—The annual conversazione of the members was held on Wednesday evening, by permission of the Education Department in the South Kensington Museum, and was attended by considerably more than 2000 persons. The President (Mr. J. Brunlees) and Mrs. Brunlees received their guests in the second division of the Architectural Court, the floral decoration of which, as well as of the first division of the court, was excellent. Amongst those present were Lord Justice Baggallay, Gen. Foord, Gen. Rundall, Sir J. W. Bazalgette, Mr. B. Baker, Mr. C. E. Cooper, Sir P. Abel, Mr. T. Hawkey, Sir H. Rawlinson, Sir J. Coode, Sir J. Douglas, Sir W. Siemens, Dr. Webster, M.P., Sir W. Thomson, Prof. Leone Levi, Mr. J. Fowler, Sir J. Hawkshaw, Mr. J. Abernethy, Mr. E. Woods, Mr. G. B. Bruce, and Mr. Hyde Clarke, as well as many of the Commissioners to the Fisheries Exhibition. In the Lord President's Court the usual Loan Collection, itself sufficiently attractive, was supplemented by Mr. Edward Plater's Glee Union, who performed an admirable selection of madrigals, glees, and part songs, in a manner which showed that thorough training had been bestowed upon naturally good voices, which, however, had sometimes the disadvantage of the discordant accompaniment of the Hungarian band in the Italian Court close by; not that the latter band discoursed bad music, but the effect of Coward's Peaceful Slumbering with Berkes Lagos's Magyar Abband, played upon two powerful dulcimers and a full string-band, as an accompaniment, must be heard to be properly appreciated. Mr. Berkes Lagos's troupe were more fortunate, the voices of the glee union not being noticeable in the Italian Court when the Hungarians were in full play, and it is but fair to say that their rendering of Erkel's Falorusza; Rakosi, with andante and march; and Waldteufel's beautiful Berceuse Walzer, left nothing to desire for precision and brilliancy of execution. The President and Mrs. Brunlees may be congratulated upon the admirable arrangements they had made for the entertainment of their guests, and must have been gratified at the manner in which all present appeared to appreciate it.

TREGONTHES AND OLD POLGOOTH CONSOLS.—The latest report from these mines shows that steady progress is being made. Four different pitches have been set on tribute at prices varying from 8*s.* to 11*s.* 1*d.* The value of these bargains is apparent.

SALE OF BALMYNHEER MINE, CORNWALL.

MR. W. T. DAVEY, Auctioneer, &c., Redruth, is favoured with instructions from the Mortgagees TO SELL, BY PUBLIC AUCTION, on Tuesday, June 19th, at Twelve for One o'clock precisely, at the Account House,—

BALMYNHEER MINE,

In the Parish of Wendron, Cornwall, as a going concern, together with all the MACHINERY AND MATERIALS THEREON,

And the leases under which they are worked, viz.:

ONE 45 inch cylinder PUMPING ENGINE, 9 feet stroke in cylinder by 8 feet in shaft, with one excellent 11 ton Cornish boiler and fittings, and first piece of rod and caps.

ONE 24 inch cylinder STAMPING ENGINE, with two 11 ton boilers and fittings, three iron stamp axes of 18 heads each, and lifters, heads, cams, braces, &c., complete.

King and Queen post balance bob, one 50 feet shears, with sheaves, &c., 10 fms. of 11 inch pitwork (underground), 40 fathoms capstan chain, horse wheel, with stands, pulleys, &c., whim kiddles, tram wagons, sheaves, &c., about 200 fathoms of 2½ and 3 in. iron rods, with connections, pulleys, &c., three wire ropes, iron rails, one powerful double acting winch, smith's tools, including 36 inch bellows, taps, and plates, miners' tools, drop screw, bucket prongs, rings, &c., tin and other chests, buddle gearing, two iron kieves, wood sheds, iron water wheel, 8 feet diameter, water dry tube, with damper, 24 feet long by 3 feet 6 inches.

LOWER BAL.—Two balance bobs, with connections, rods, &c., shaft tackle, one single winch, iron work of whim, fire bars, and several other articles in use on mines. Also one water stamps of 8 heads, with floors, &c., complete.

The above mining property is situated in a very celebrated tin bearing district, is held under a lease from the Duchy of Cornwall, granted 10th May, 1874, for a term of 21 years at 18th dies. It is confidently believed that a further outlay of £1500 (in forking out the water and putting the machinery, engine houses, tin floors, &c., in proper order) will make it a permanent paying concern. It is of proved value—as for the shallow depth (only 40 fathoms below surface) over £30,000 worth of tin has already been sold. Everything will be found of good quality, and in working order.

The foregoing Machinery, Plant, and Materials, together with the Leases or Setts, will be first offered in One Lot as a going concern at a reserve price; and if not sold will immediately be put up in lots to suit the convenience of purchasers, and sold without the slightest reserve.

REFRESHMENTS WILL BE PROVIDED.

MARK SALE—TUESDAY, JUNE 19TH, AT ONE O'CLOCK SHARP.

To view, apply on the Mine; and for further particulars to Messrs. LANE, MONRO, and SOUTER, Solicitors, 11, Queen Victoria-street, London, E.C.; or Messrs. BOWMAN and CO., Solicitors, 4, Great Winchester-street, London; F. W. MICHELL, Esq., Engineer, Redruth; or at the Offices of the Auctioneer, No. 3, West End, Redruth.

Dated Redruth, May 28th, 1883.

[The above advertisement will not be repeated.]

MONMOUTHSHIRE.

TO BE LET, ON LEASE, about TWO HUNDRED AND FORTY ACRES of

VALUABLE MAIDEN MINERAL PROPERTY,

Part of the NANT-Y-GLO AND BLAINA ESTATE, adjoining Collieries of the Ebbw Vale Steel, Iron, and Coal Company (Limited), Messrs. John Lancaster and Co., and the South Wales Colliery Company (Limited).

The property is believed to contain all the Steam Coal Seams usually found in the Monmouthshire Coal Field.

For further particulars, apply to WM. ADAMS, Esq., C.E., Cardiff; or Messrs. COLBORNE and WARD, Solicitors, Newport, Mon.

FESTINIOG, NORTH WALES.

TO BE SOLD, BY PRIVATE CONTRACT, a bona fide SLATE AND SLAB QUARRY, situated in the FESTINIOG MOUNTAINS, near Lord Palmerston's Quarry, and in close proximity to the Festiniog Branch of the London and North-Western Railway.

For particulars, plans, reports, &c., apply to R. ISAAC-JONES, Tremadoc, North Wales.

IMPORTANT TO MINE OWNERS.

FOR SALE, owing to completion of contract, a complete PLANT of ROCK-DRILLING MACHINERY, comprising—ONE AIR-COMPRESSING ENGINE and VERTICAL BOILER, with connections, air receiver, rock drills, and heading stand, 380 yards air supply piping, &c., &c. This Machinery has been driving a cross-cut in hard rock 3 to 4 fathoms per week forward. Address,—WARSOP AND HILL, NOTTINGHAM.

RICH AND EXTENSIVE NICKEL MINES, with SMELTING FURNACES, FOR SALE. Or a suitable PARTNER WANTED to work the mines with the proprietor. Area of concession, 50,000,000 square yards. Contents of ores, 1½ to 4 per cent. nickel, free from arsenic and antimony. All necessary time allowed for inspection and negotiations. Address, GEORG DAHM, Cologne (Germany).

TO CAPITALISTS AND OTHERS.

ASPLENDID SETT, contiguous to the celebrated GREAT HOLWAY and WEST HOLWAY MINES, TO BE DISPOSED OF.

Full particulars can be had upon application to "E. M. E.," Holywell, Flintshire.

ENGINES, BOILERS, &c., FOR SALE.—FIRST-CLASS 50-inch cylinder PUMPING ENGINE ditto 24-inch " ROTARY ENGINE

CALCINER, Apply to Capt. NICHOLLS, Camborne.

ON SALE.—FOUR LANCASHIRE BOILERS, 30 feet by 7 feet. Shells double rivetted, and Bowling expansion rings in flues.

THREE ditto, 30 feet by 7 feet, with plain flues.

THREE ditto, 30 feet by 7 feet 3 inches, with six Galloway tubes in each flue.

THREE ditto, 26 feet by 7 feet, with four Galloway tubes in each flue.

EDWARD RATCLIFFE, HAWARDEN, NEAR CHESTER.

ON SALE.—THREE LANCASHIRE BOILERS, 32 feet by 6 feet 9 inches; now working at 70 lbs under Insurance, near Manchester. Cheap if taken at once.

EDWARD RATCLIFFE, HAWARDEN, NEAR CHESTER.

FOR SALE.—ONE 50 inch and ONE 40 inch PUMPING ENGINES, with BOILERS and FITTINGS.

ONE 22 inch ROTARY ENGINE.

ONE 12½ inch HORIZONTAL ENGINE, with CAPSTAN and HAULING MACHINE attached.

All the above engines are in first-class condition. Several WATER WHEELS, from 20 to 60 feet diameter. STAMPS' AXLES and a large quantity of SECONDHAND MINING MATERIALS.

Apply to—J. AND H. PEARCE, TAVY IRONWORKS, TAVISTOCK.

STEAM BOILERS FOR SALE, SECONDHAND, with and without Galloway Tubes, single and double rivetted, working pressure of 60 lbs., 65 lbs., 70 lbs., and 80 lbs. steam pressure VERY CHEAP.

FIVE BOILERS, 30 feet by 7 feet 6 inches diameter, excellent order.

SIX BOILERS, 30 feet by 7 feet 6 inches diameter, " "

FOUR BOILERS, 28 feet by 7 feet " "

THREE BOILERS, 26 feet by 7 feet " "

FOUR BOILERS, 24 ft. by 6 ft. 6 in. " Equal to new. " "

WINDING ENGINES and COLLIERY PLANT of every description, second-hand, in stock. VERY CHEAP. Write to—

H. HELLWEEL AND CO., 4, NORTH CORRIDOR ROYAL EXCHANGE, MANCHESTER.

SUMMER TOURS IN SCOTLAND.

GLASGOW AND THE HIGHLANDS. ROYAL ROUTE VIA CRINAN AND CALEDONIAN CANALS. Royal Mail Steamer COLUMBA or IONA, from GLASGOW daily at Seven A.M., and from GREENOCK at Nine A.M., conveying, in connection with his West Highland Steamers, PASSENGERS for OBAN, FORT WILLIAM, INVERNESS, LOCHALVE, SKYE, GAILLOCH, STAFFA, IONA, GLENCOE, ISLAY, STORNEYWAY, &c. Official Guide, 3d.; illustrated, 6d. and 1*s.* by post; or at W. H. Smith and Son's Railway Bookstalls. Time Bill, with Map and Fares, free from the Owner, DAVID MACBRATNE, 119, Hope-street, Glasgow.

INDIAN AND AUSTRALIAN GOLD, TIN, COPPER, ANTIMONY, and other MINES REPORTED ON for Private Shareholders or Public Companies by—

WILLIAM NICHOLAS, F.G.S., Lecturer on Mining, University, Melbourne, Consulting Mining Engineer, Exchange, Melbourne, Victoria, Australia.

SECOND ISSUE. SUBSCRIPTION LIST NOW OPEN AT PAR.

THE CONWAY VALLEY FREEHOLD MINING COMPANY

(LIMITED).

Incorporated under the Joint-Stock Companies Acts, with Limited Liability.

Nominal Capital, £75,000, in 75,000 Shares of £1 each.

Present Issue—£5000 in Ordinary shares. Payable, 2*s.* 6*d.* on application, 2*s.* 6*d.* on allotment, 5*s.* one month after allotment, balance as required.

£5000 in 7 per cent. Debenture Bonds of £100 each. Payable, £10 on application, £10 on allotment, balance in exchange for the bond. The Debentures are secured by mortgage upon the estate of the company.

DIRECTORS.

THOMAS T. FORD, Liverpool, Chairman Albion Bank and Discount Company (Limited).

A. MONCIEF BURNS, Liverpool, Director Bagillt Zinc Smelting Company (Limited).

B. BUCKLEY CHADWICK, Walton, Director East Long Rake Lead Mining Company (Limited).

W. ARNOLD BRADLEY, Nannerch, North Wales.

SECRETARY—G. MILLWARD HINTON.

REGISTERED OFFICES.

GRANITE BUILDINGS, 6, STANLEY STREET, LIVERPOOL.

In commencing this issue of shares and debentures to the attention of the investing public, the board desire to point out the following facts:—The property, which is close to Conway, North Wales, is freehold, therefore subject to no rent or royalty, is proved to a depth of 300 ft., is in an advanced state of development, possesses ample machinery, plant, buildings, fixtures, tools, &c., and requires only a little further opening out to make enormous returns of the richest ore in the kingdom.

The mines have been inspected and reported favourably upon by some of the highest authorities in the world, amongst whom may be mentioned the names of Sir Andrew C. Ramsay, the late President of the British Association, the Director-General of Geological Survey of the United Kingdom; and T. Fanning Evans, Esq., late Her Majesty's Inspector of Mines in North Wales.

The mines are under the practical management of Mr. H. B. Vercoe, whose successful management of other mines has gained for him his great reputation. He reports as follows:—

Conway Valley Freehold Copper Mines, 23rd May, 1883.

TO THE DIRECTORS.

GENTLEMEN,—As requested I beg to hand you short special report, giving the latest particulars as to the mines.

In the 42 fm. level, the only change since my last is that the rib of orestuff on the footwall has enlarged. This I predicted would be the case as we approached towards the richer ore ground gone down in sole of 30 fm. level, and which has been continuously productive from the surface downward, through No. 2 sump and adjacent workings.

I hope you will at once place me in a position to develop the mine by the aid of rock-drills by making a contract with a rock-boring company. This is all the property needs to make it one of the best copper mines in Wales, and the necessary capital, I feel certain, will be cheerfully subscribed by the shareholders, as they have so lately seen the grand prospects their mine presents; and they will learn from this report that since then important improvements have again added to its value.—Yours truly,

H. B. VERCOE.

Specimens of ore, &c., from the various workings may be seen at the offices of the company, where application forms may be obtained, with all other necessary information.

THE LEADHILLS SILVER-LEAD MINING AND SMELTING COMPANY (LIMITED).

Notice is hereby given, that the Directors have this day DECLARED a DIVIDEND of FOUR SHILLINGS per share, free of income tax, PAYABLE on and after Tuesday, the 12th June, to the shareholders now on the books of the company.

By Order, F. R. WILSON, Secretary.

30, Finsbury-circus, London, E.C., 30th May, 1883.

THE CAPE COPPER MINING COMPANY (LIMITED).

Notice is hereby given, that at a Meeting of the Directors of this company, held to-day, it was resolved:—

"That a DIVIDEND of TWENTY SHILLINGS per share, free of income tax, be and is hereby DECLARED, PAYABLE on the 23rd day of June, 1883, to the shareholders on the books of the company on the 11th June, 1883; and that the Transfer Books be closed during the said 11th June."

It was further resolved:—

"That a BONUS of TWENTY SHILLINGS per share, free of income tax, be and is hereby DECLARED, PAYABLE on the 23rd June, 1883, to the shareholders on the books of the company on the 11th day of June."

By order of the Board,

J. C. LEAVER, Secretary.

6, Queen-street-place, London, 30th May, 1883.

MINE "E L C A L L A O," GUAYANA, VENEZUELA.

COUPONS OF SHARES 322 Gold in bars produced in the month of April, 1883, and re-mitted to Messrs. Baring Brothers and Co., London, 11,273-11 ozs. DIVIDEND distributed for each coupon, \$400.

(Signed) A. LICIONI, President.

(Signed) VICTOR T. GRILLET, Treasurer.

STEPHEN BARKER, NICKEL AND NICKEL SILVER WORKS, OZZELL STREET NORTH, BIRMINGHAM.

WM. BREDEMAYER, MINING, CONSULTING, AND CIVIL ENGINEER, 48, SECOND SOUTH STREET.

United States Mineral Surveyor for Utah and Idaho, Notary Public, Geological Examinations, Reports on Mining Properties; Surveys Mines, Railroads, and Canals, and Superintends the Workings of the same. Prepares Estimates and Plans for Opening and Working Mines. Expert on Mining Questions before the Courts. Address, P. O. Box, 1157, Salt Lake City, Utah.

T. C. KITTO,

PRACTICAL GEOLOGIST AND MINING ENGINEER

Who has had great experience in the Gold Mines of Brazil, California, and Australia, having recently examined the Gold Fields of the TRANSVAAL, is prepared to furnish Reliable Reports as to their value. All kinds of Mineral Deposits carefully examined and properly estimated. Apply: LULWORTH HOUSE, GUNNERSBURY.

FREDERIC F. CHISOLM, CONSULTING MINING ENGINEER & FINANCIAL AGENT, OFFICE, 66, CHEESMAN BLOCK, DENVER, COLORADO.

A Speciality made of care of Mining Property for non-resident Owners, and the General Management of Property for Foreign Mining Companies. REFERENCES FURNISHED IF DESIRED.

J. A. JONES,

MINING ENGINEER,

GIJON (ASTURIAS), SPAIN.

Mines inspected and reported on. Assays and valuations effected. Has on hand offers of Mines of Copper, Calamine, Blende, Phosphate of Lime, Tin, Lead, Iron, Manganese, and Manganiferous Iron Ores.

ESTABLISHED 1863. MESSRS. CUNLIFFE, ENTWISLE, AND CO.

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Manufactured and sold by
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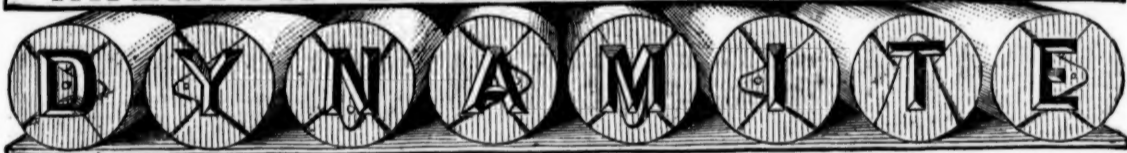
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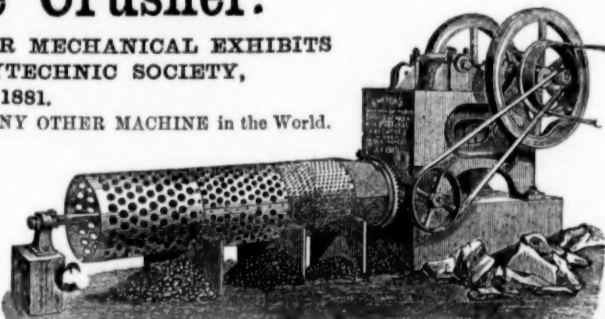
The Only Knapping Motion Stone Breaker and Ore Crusher.

AWARDED THE ONLY SILVER MEDAL FOR MECHANICAL EXHIBITS
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GUARANTEED to do MORE WORK with less power THAN ANY OTHER MACHINE in the World.
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To Mr. Baxter, Leeds. *Cinderford, Feb. 13, 1883.*
 DEAR SIR,—I am pleased to be able to tell you that the Machine works splendidly. We are breaking 16 trucks a day now and we thought it a good day's work to do 10 a day with the old Machine, so you can see the difference. I had a gentleman looking at it yesterday, and he was surprised to see it work so easily.
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W. H. BAXTER & CO., ALBION STREET, LEEDS,

Will EXHIBIT at the ENGINEERING EXHIBITION at the AGRICULTURAL HALL, LONDON, in JULY, 1883.

For Excellence
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SECOND-HAND MINING MACHINERY FOR SALE,
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 For Copper and Argentiferous Galena Ores.
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The Pacific Water Jacket Smelters embrace many features that are entirely new and of great practical utility, which are secured by letters patent.

No other furnaces can compare with these for durability, and in capacity for continuous and interrupted work.

More than One Hundred of them are now running in the various mining districts of the United States, giving results never before obtained as regards continuous running, economy of fuel grade and quality of bullion produced.

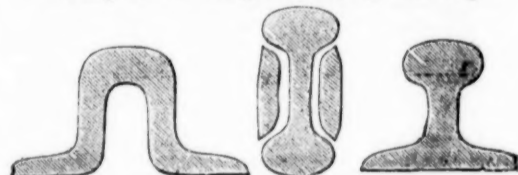
These Smelters are shipped in a complete state, requiring no brick or stone work, thus saving great expense and loss of time in construction.

Complete smelting plants made to order, with all the improvements that experience has proved valuable in this class of machinery. Skilled and experienced smelters furnished when desired to examine mines and to superintend constructing and running of furnace Estimates given upon application. Send for circular.

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**BEST METAL FOR BUSHES,
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IRON AND STEEL RAILS, of all sections, from 10 to 86 lbs. per yard, new perfect, new slightly defective, or second-hand, with Fish-plates, Bolts and Nuts, Chairs, Spikes, and Points and Crossings to match, when required.

STEEL AND IRON WIRE ROPES, LOCOMOTIVE ENGINES, &c., &c.
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 STEEL OF ALL KINDS. **PIG IRON OF ALL KIND**
 Delivered at all Railway Stations and Ports in Great Britain.

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**SAFETY FUSE
 MANUFACTURER.**



This manufacture embraces all the latest improvements for use in Blasting in Mines, Quarries, or for Submarine Purposes; and is adapted for exploding Gunpowder, Dynamite, or any other Explosive; and is made suitable for exportation to any part of the world. Price Lists and Sample Cards on application.

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W. TREGAY, MINING ENGINEER, REDRUTH.
 (Established upwards of a Quarter of a Century)
 ADVISOR ON ALL MINING MATTERS.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Divid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
3200 Blue Hills, t, c, St. Agnes	4 6	11	8	7 8	0 10	0 10
6000 Carr Brea, t, c, Illogan	11 7	11	8	7 8	0 10	0 10
4000 Craggan, t, c, Illogan	11 7	11	8	7 8	0 10	0 10
10240 Devon Gt. Consol., t, c, Tavistock	1 0	0	5	4 1/2	11 7	0 5
4236 Dolcoath, t, c, Illogan	10 14	10	57 1/2	57 59	135 16	0 1
6400 East Pool, t, c, Illogan	0 9	9	44	42 1/2	45	0 0
12000 Great Holway, t, c, Illogan	5 0	0	5 1/2	5 1/2	0 5	0 5
15000 Great Laxey, t, c, Illogan	4 0	0	17 1/2	16 1/2	17 1/2	0 0
6400 Green Hurth, t, c, Illogan	0 6	0	8 1/2	8 1/2	4 1	0 0
20000 Groswinden, t, c, Illogan	2 0	0	3 1/2	3 1/2	0 19	0 0
20000 Gunnislake, t, c, Illogan	2 0	0	3 1/2	3 1/2	0 19	0 0
20000 Isle of Man, t, c, Illogan	25 0	0	—	—	83 5	0 0
20000 Killbuck, t, c, Illogan	4 3	6	3 1/2	2 1/2	3 1/2	0 0
20000 Leadhills, t, c, Illogan	6 0	0	2 1/2	2 1/2	0 1	0 0
4000 Leadhills, t, c, Illogan	18 15	0	—	—	614 10	0 0
10000 Mellanear, t, c, Illogan	2 0	0	3 1/2	3 1/2	2 2	0 0
9000 Minera Mining Co., t, c, Illogan	5 0	0	8	8	69 17	0 0
20000 Mining Co. of Ireland, t, c, Illogan	7 0	0	—	—	24 0	0 0
18229 North Hendre, t, c, Illogan	2 10	0	—	—	318 0	0 0
8146 Ditto	1 5	0	—	—	0 11	0 0
20000 North Levant, t, c, Illogan	13 6	0	2 1/2	2 1/2	416 0	0 0
4760 Penrhyn, t, c, Illogan	4 0	0	—	—	317 0	0 0
10000 Phenix United, t, c, Illogan	6 0	0	3 1/2	3 1/2	17 7	0 0
12000 Roman Gravel, t, c, Illogan	7 10	0	—	—	9 11	0 0
10000 South Caradon, t, c, Illogan	10 0	0	—	—	0 0	0 0
4122 South Gendurrow, t, c, Illogan	6 5	0	—	—	10 5	0 0
9000 South Daren, t, c, Illogan	1 10	0	—	—	0 0	0 0
6000 Tincroft, t, c, Illogan	12 0	0	—	—	51 3	0 0
5000 Van, t, c, Illogan	4 5	0	—	—	25 13	0 0
20000 West Holway, t, c, Illogan	1 0	0	—	—	0 1	0 0
6000 West Hasset, t, c, Illogan	7 5	0	—	—	28 3	0 0
6000 West Killy, t, c, Illogan	0 12	0	—	—	0 16	0 0
12000 Wheel Hendre, t, c, Illogan	2 4	0	—	—	0 0	0 0
1024 Wheel Eliza Consol., t, c, Illogan	18 0	0	—	—	54 10	0 0
6000 Wheel Grenville, t, c, Illogan	15 0	0	—	—	12 6	0 0
4236 Wheel Killy, t, c, Illogan	5 12	0	—	—	12 18	0 0
4000 Wheel Peavor, t, c, Illogan	9 1	0	—	—	8 13	0 0

FOREIGN DIVIDEND MINES.

Shares.	Divid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
35500 Almaden, t, c, Spain	2 0	0	1 1/2	1 1/2	2 10	0 0
130000 Almaden and Tinto Consol., t, c, Spain	1 0	0	—	—	0 6	0 0
20000 Australian, t, c, South Australia	7 0	0	—	—	1 7	0 0
150000 Bideford Creek, t, c, California	4 0	0	—	—	0 0	0 0
30000 Bratsberg, t, c, Norway	2 0	0	—	—	0 0	0 0
30000 California, t, c, California	1 0	0	—	—	0 0	0 0
20000 Cape Copper Mining, t, c, South Africa	0 0	0	—	—	51 7	0 0
60000 Colorado United, t, c, Colorado	5 0	0	—	—	0 14	0 0
50000 Copiapo, t, c, Chile	3 10	0	—	—	2 8	0 0
20000 English and Australian, t, c, South Australia	2 10	0	—	—	3 2	0 0
20000 Eng. Aus., t, c, pref. (20000 o.)	1 0	0	—	—	0 3	0 0
25000 Fortuna, t, c, Spain	2 0	0	—	—	0 3	0 0
60000 Frontino, t, c, Spain	2 0	0	—	—	0 11	0 0
270000 Henriett, t, c, Leadville, Colorado	1 0	0	—	—	0 0	0 0
200000 La Plata, t, c, Leadville	2 0	0	—	—	0 12	0 0
50000 Linares, t, c, Spain	3 0	0	—	—	19 10	0 0
200000 Marbella Iron Ore, t, c, Spain	10 0	0	—	—	0 10	0 0
185164 Mason & Barry, t, c, Portugal	10 0	0	—	—	2 10	0 0
60000 New Quebec, t, c, Venezuela	5 0	0	—	—	0 4	0 0
1000 Ditto, Debentures	100 0	0	—	—	90 95	0 0
50000 Pampullico, t, c, Chile	4 0	0	—	—	1 12	0 0
25000 Pitagor, t, c, Chile (in 6000 £ pd.)	0 10	0	—	—	0 1	0 0
1400 Pontgibaud, t, c, France	20 0	0	—	—	10 12	0 0
100000 Port Phillip, t, c, Clunes (22 shares)	1 0	0	—	—	1 14	0 0
50000 Rara Fortuna, t, c, Argentina	1 0	0	—	—	0 0	0 0
50000 Richmond Consol., t, c, Nevada	5 0	0	—	—	6 1/2	0 0
25432 Rio Pinto, t, c, Moravia Bds., Hueco	0 102	0	—	—	10 102	0 0
250000 Ditto, shares	10 0	0	—	—	2 18	0 0
40000 Santa Barbara, t, c, Brazil	0 10	0	—	—	0 12	0 0
120000 Scottish-Australian Mining Co., t, c, Scotland	1 0	0	—	—	15 p. cent.	0 0
80000 Ditto, New	0 10	0	—	—	15 p. cent.	0 0
22500 Sierra Buttes, t, c, California	2 0	0	—	—	2 0	0 0
40000 Ditto, Plumas Eureka	2 0	0	—	—	1 1/2	0 0
250000 St. John del Rey (145 stock and multiple deal in)	0 102	0	—	—	10 102	0 0
160000 Tambora, t, c, Wynaad	1 0	0	—	—	0 0	0 0
91896 Tharais, t, c, Spain (31000 £ pd.)	10 0	0	—	—	34 1	0 0
20000 Tolima, t, c, Colombia (A & B shares)	5 0	0	—	—	2 11	0 0
25000 Victoria (London), t, c, Australia	1 0	0	—	—	0 13	0 0
100000 Victorine (Nevada, U.S.), Deb. Bds.	1 0	0	—	—	0 0	0 0
50000 Western Andes, t, c, Colombia	5 0	0	—	—	1 1/2	0 0
2100 W. Prussian (5000 pref. £10 pd.)	10 0	0	—	—	4 2	0 0
44900 Yorke Pen., t, c, South Aust. Pref.	1 0	0	—	—	0 3	0 0

* Have made calls since last dividend was paid.

NON-DIVIDEND BRITISH MINES.

Shares.	Divid.	Last wk.	Clos. pr.
25000 Aberdona, t, c, Denbigh	1 10	0	1 1/2
30000 Alston United, t, c, Cumberland	1 0	0	—
12000 Alston, t, c, Devonshire	1 0	0	1 1/2
12000 Asheton, t, c, Carnarvonshire	5 0	0	—
12000 Bedford Unit, t, c, Tavis (21 lib.)	0 14	0	1 1/2
30000 Bodidris, t, c, Denbighshire	1 0	0	—
10000 Brada, t, c, Isle of Man	1 0	0	—
30000 British, t, c, Wrexham	1 0	0	—
30000 Buco Consol., t, c, Flintshire	1 0	0	—
20000 Buich United, t, c, Cardigan	1 0	0	—
12000 Collacombe Consol., t, c, Llanrwst	0 2	0	—
50000 Carn Camborne, t, c, Camborne	1 0	0	—
20000 Carnarvon, t, c	1 0	0	—
37500 Carnarvonshire Cons., t, c, Llanrwst	2 0	0	—
6000 Cathedral, t, c, Gwynedd	1 3	6	1 1/2
20000 Central Fossils, t, c, Isle of Man	1 17	6	—
20000 Coed-y-Fedw Pant-y-Buarth, t, c	1 0	0	—
24500 Cook's Kitchen, t, c, Illogan	3 14	9	27 1/2
10000 Cornwall Great Cons., t, c, (4500 issued)	1 0	0	—
30000 Creigiau, t, c, Denbighshire	0 17	0	—
6400 Crook Burn, t, c, Cumberland	0 17	0	—
45000 D'Esby Mountain, t, c, Llanrwst	0 10	0	—
12000 Derwent, t, c, Durham	4 0	0	—
60000 Devon Friendship, t, c, Tavis	1 0	0	—
12000 Devon Great United, t, c, (21 shares)	1 5	0	—
50000 Drakewalls, t, c, Calstock	0 15	0	—
12000 East Blue Hills, t, c, St. Agnes	0 5	0	—
6000 East Botallack, t, c, St. Just	0 16	0	—
30000 East Caradon, t, c, St. Cleer	4 19	0	—
4000 East Chiverton, t, c, Fowey	1 17	3	—
30000 E. Craven Moor, t, c, Pateley Bridge	1 0	0	—
15000 East Devon Cons., t, c, Buckfastleigh	2 0	0	—
30000 East Herodfoot, t, c, Liskeard	1 0	0	—
20000 East Long Rake, t, c, Wales	1 0	0	—
25500 East Roman Gravel, t, c, Salop	1 0	0	—
18000 East Van, t, c, Llanidloes	5 0	0	—
2048 East Wheel Lovell, t, c, Helston	17 6	1	11 1/2
100000 East Wheel Rose, t, c, Newlyn East	1 0	0	—
12500 Frongoch, t, c, Cardigan (11000 sh. iss.)	2 0	0	—
12000 Ganton, t, c, Tavis	2 0	0	—
40000 Glas. Car. t, c, (30000 £ pd., 10000 15s. pd.)	1 0	0	—
30000 Gobbett, t, c, Devon	1 0	0	—
10000 Goddards, t, c, Carnarvon	1 0	0	—
30000 Goginan, t, c, Cardigan	1 0	0	—
20000 Goginan, t, c, Cardigan	1 0	0	—
8500 Gorse and Merlyn Consol., t, c	2 10	0	—
20000 Great Dylliff (10000 sh. issued)	1 0	0	—
6000 Great West Chiverton, t, c, St. Agnes	0 5	0	—
6000 Great Wheel Worth, t, c, Cornwall	1 0	0	—
10000 Gwyn-y-Mynydd, t, c, Flint (pref.)	4 0	0	—
7000 Gwydyr Amal, t, c, Carnarvon	1 0	0	—
12000 Herodfoot, t, c, near Liskeard	1 0	0	—
18000 Hingston Down, t, c, Calstock	0 13	0	—
20000 Kirkeham, t, c, (20000 unissued)	1 0	0	—
25000 Kit Hill Gt. Cons., t, c, (21 sh.)	0 17	6	—
15000 Lady Ann, t, c, Llanarmon	1 0	0	—
25000 Langford, t, c, Callington	0 10	0	—
15000 Llanedega, t, c, Wales	1 0	0	—
5120 Lovell, t, c, Wenden	0 18	0	—
6000 Marke Valley, t, c, Llanidloes	3 15	0	—
6000 Medlyn Moor, t, c, Wenden	1 0	0	—
20000 Mona, t, c, Anglesa	5 0	0	—
15000 Monkstown, t, c, Devon	2 0	0	—
20000 Mostyn Consol., t, c, Flint	1 0	0	—
12000 Morris Dr., t, c, Anglesa	1 0	0	—
20000 Mount Bay, t, c, Breage	1 0	0	—
6144 Mount Carbis, t, c, Redruth	1 10	0	—
12000 New Caradon, t, c, St. Cleer	0 5	0	—
2400 New Cook's Kitchen, t, c, Illogan	9 10	0	—
8000 New Dolcoath, t, c, Camborne	3 0	0	—
10000 New Great Wheel, t, c, Breage	0 10	0	—
12000 New Lambeth, t, c, St. Agnes	3 0	0	—
20000 New Killy, t, c, St. Agnes	1 5	0	—
15000 New Redmoor, t, c, Callington	1 5	0	—
17500 New Terras, t, c, St. Austell	2 0	0	—
3500 New Tincroft, t, c, Lelant	6 0	0	—
12000 New Trumpet, t, c, Wenden	1 0	0	—
9000 New Van Cons., t, c, Glyn	1 0	0	—
12000 New West Caradon, t, c, Liskeard	0 4	0	—
30000 New Wheel Peavor, t, c, Redruth	1 0	0	—
15000 New Wye Valley, t, c, Montserrat	1 0	0	—
12000 North Blue Hills, t, c, St. Agnes	0 2	6	—
5328 North Busy, t, c, Scorrier	14 8	0	—
10000 N. D'Esby Mount, t, c, Carnarvon	1 0	0	—
25000 North Goginan, t, c, Cardigan	1 0	0	—
6400 North Green Hurth, t, c, (3400 £ pd.)	0 2	6	—

NON-DIVIDEND MINES—continued.

Shares.	Divid.	Last wk.	Clos. pr.
25000 North Grogwin, t, c, Cardigan	1 0	0	—
12000 North Herodfoot, t, c, Liskeard	1 13	0	—
50000 North Molton, t, c, m. n., Devon	1 0	0	—
8000 North Penrith, t, c, St. Agnes	2 15	6	—
2936 North Trekerly, t, c, St. Agnes	1 0	0	—
8000 Northern, t, c, Durham	8 17	0	—
40000 Oker, t, c, a, Calstock	1 0	0	—
80000 Old Shepherds, t, c, Cornwall	1 0	0	—
12000 Owen Vein & Tregar, t, c, Marazion	2 0	0	—
12000 Pandora, t, c, Carnarvon	1 0	0	—
45000 Parys Corporation, t, c, Anglesa	1 0	0	—
7500 Pateley Bridge, t, c, Yorkshire	1 0	0	—
6000 Pedn-an-drea, t, c, Redruth	3 15	0	—
12000 Pelyn Wood, t, c, Llanvilly	0 2	0	—
8000 Penant, t, c, North Wales	5 0	0	—
20000 Penegarg, t, c, Carmarthen	1 0	0	—
12000 Pen-y-Breath, t, c, Illogan	1 0	0	—
15000 Perran Consol., t, c, Flintshire	1 0	0	—
12000 Perran Wheel Alfred, t, c	1 0	0	—
2000 Polrebo, t, c, Crown	1 10	0	—
10000 Polrose, t, c, Cornwall	1 5	0	—
10000 Port Nigel Syn., t, c, Carnar (4000 sh.)	0 15	0	—
19000 Pr. Patrick, t, c, (12000 pf. 10 p. o.)	1 0	0	—
12000 Prince Royal, t, c, a, St. Agnes	1 0	0	—
12000 Prince of Wales, t, c, Anglesa	1 2	0	—
30000 Russell United, t, c, Calstock	0 15	6	—
30000 Silver Hill, t, c, Callington	1 5	6	—
50000 Sinclair, t, c, Whitford	1 0	0	—
40000 Sortridge, t, c, Horbridge	1 0	0	—
6000 South Carbis, t, c, Redruth	0 10	0	—
40000 South Devon Unit, t, c, Buckfastleigh	1 0	0	—
12000 South Dolcoath, t, c, Illogan	0 19	0	—
6000 South Penrith, t, c, St. Agnes	2 19	6	—
6000 South Tolcarne, t, c, Camborne	5 11	6	—
2043 South Wheel Croft, t, c, Illogan	3 19	6	—
6000 South Wheel Frances, t, c, Illogan	9 14	6	—
40000 Tamar, t, c, Bealston	1 0	0	—
110000 Tankerville Gt. Consol., t, c, Salop	1 0	0	—
12000 Trebartha Llanarmon, t, c, Northill	0 1	0	—
6000 Trebartha, t, c, Cornwall	1 0	0	—
50000 Trebartha and Old Polgoth Con.	3 10	0	—
10000 Trebartha, t, c, Gwynedd	1 0	0	—
6000 Trevarren United, t, c, Cornwall	1 0	0	—
12000 Trevelian United, t, c, St. Agnes	0 3	0	—
10000 Vaughan, t, c, Cardigan	10 0	0	—
8000 Victor, t, c, Illogan, Flintshire	1 0	0	—
2000 Violet Seton, t, c, Camborne	12 0	0	—
15000 Vincent, t, c, Altarnun	1 0	0	—
12000 West Assieton, t, c, Carnarvon	1 0	0	—
12000 West Cardigan, t, c, St. Cleer	0 8	3	—
3000 W. Croven Moor, t, c, Pateley Bridge	10 0	0	—
12000 West Crebor, t, c, Tavistock	0 6	—	—
10240 West Devon Consol., t, c, Calstock	1 2	6	—
10000 West Godolphin, t, c, Breage	1 2	6	—
20000 West Lisburne, t, c, Cardigan	1 0	0	—
3000 West Mary Ann, t, c, Menheniot	1 13	0	—
2000 Westley Bridge, t, c, Flintshire	1 0	0	—
12000 West Phoenix, t, c, Llanullyn	0 5	—	—
6000 West Polbren, t, c, St. Agnes	0 5	—	—
5190 West Poldice, St. Day	6 14	0	—
512 West Tolgus, c, Redruth	99 0	0	—
2048 West Wheel Frances, t, c, Illogan	35 18	3	—
3000 West Wheel Frances, t, c, Redruth	3 0	6	—
4000 West Wheel Seton, t, c, Camborne	0 17	—	—
6000 Wheel Agar, t, c, Illogan	18 0	—	—
6144 Wheel Bassett, t, c, Illogan	8 9	0	—
3000 Wheel Boys, t, c, Redruth	1 3	6	—
50000 Wheel Castle, t, c, St. Just	1 0	0	—
12000 Wheel Coat, t, c, St. Agnes	0 7	0	—
W. Conf., t, c, Wrenn, t, c, Gwynedd	2 0	0	—
3000 Wheel Britannia, t, c, Gwynedd	1 0	0	—
6000 Wheel Elizabeth, t, c, Cornwall	1 0	0	—
15000 Wheel George, t, c, St. Agnes	1 0	0	—
12288 Wheel Jane, t, c, Kea	2 4	0	—
12000 Wheel Jewell, t, c, St. Hilary	1 0	6	—
W. H. Hon. and Trevelian, t, c, Lisk.	2 0	0	—
12000 Wheel Lusk, t, c, Callington	1 0	0	—
12000 Wheel Owles, t, c, St. Just	7 3	0	—
30000 Wh. Silver & Lanteglos, t, c, Camelf.	1 0	0	—
6000 Wheel Sisters, t, c, Lelant	3 15	0	—
4096 Wheel Unity, t, c, Redruth	16 19	6	—
60000 Wheel and Gold Col. Devonshire	0 12	6	—
4000 Ystwith, t, c, Cardigan	1 0	0	—

bl, blende; c, copper; g, gold; l, lead; s, silver; sl, slate
s-l, silver-lead; t, tin; z, zinc; i, iron; a, arsenic.
* Limited Liability Companies; † quoted on the Stock Exchange.
I have paid dividends